

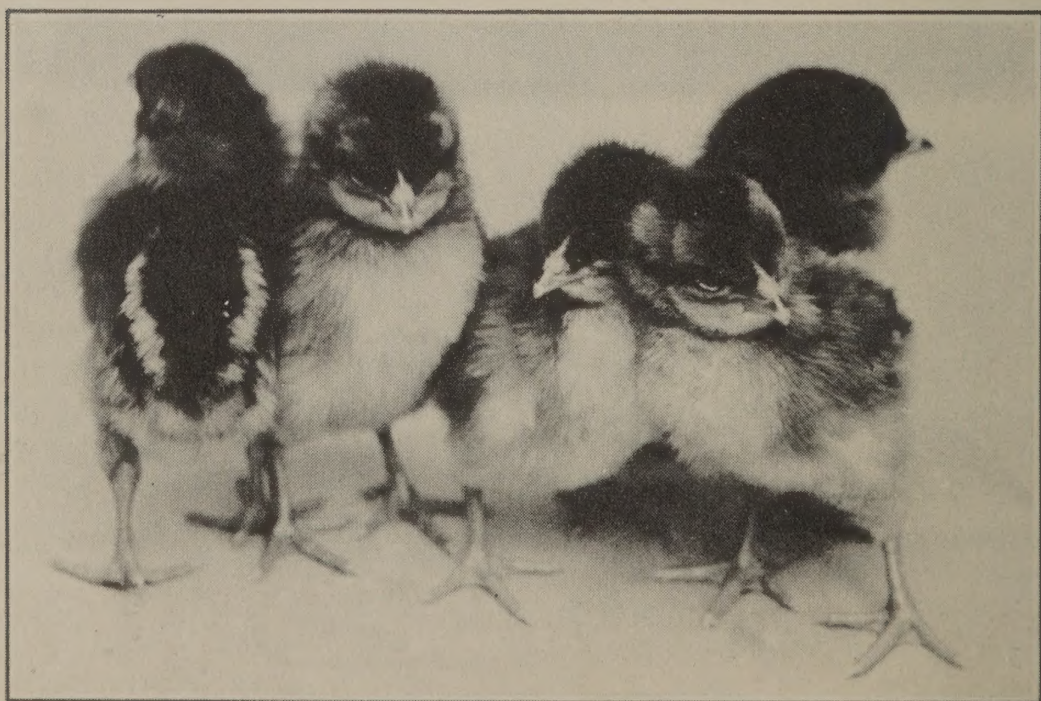


Conkeys POULTRY BOOK

The Vitamin Problem Solved!

Conkeys Y-O (Y for yeast and O for oil) solves the vitamin problem. It is a smooth, brown powder in which Marmite yeast and cod liver oil are combined by a special process whereby the oil is sealed on the yeast. This retains the potency of the vitamins and keeps them effective for a long time. So when you add Y-O to your mash you have assurance of an abundant supply of vitamins A, B and D at all times.

The value of cod liver oil does not lie in its quantity, but in the potency of vitamins A and D, which it contains. Only the highest testing cod liver oil¹ is used in Conkeys Y-O and the finished product (Y-O) is again tested for vitamins A, B and D potency to check our absolute guarantee that Y-O is the most potent and lasting carrier of vitamins A, B and D your money can buy.



Conkeys

POULTRY BOOK

A HANDY BOOK *of* REFERENCE
on POULTRY RAISING

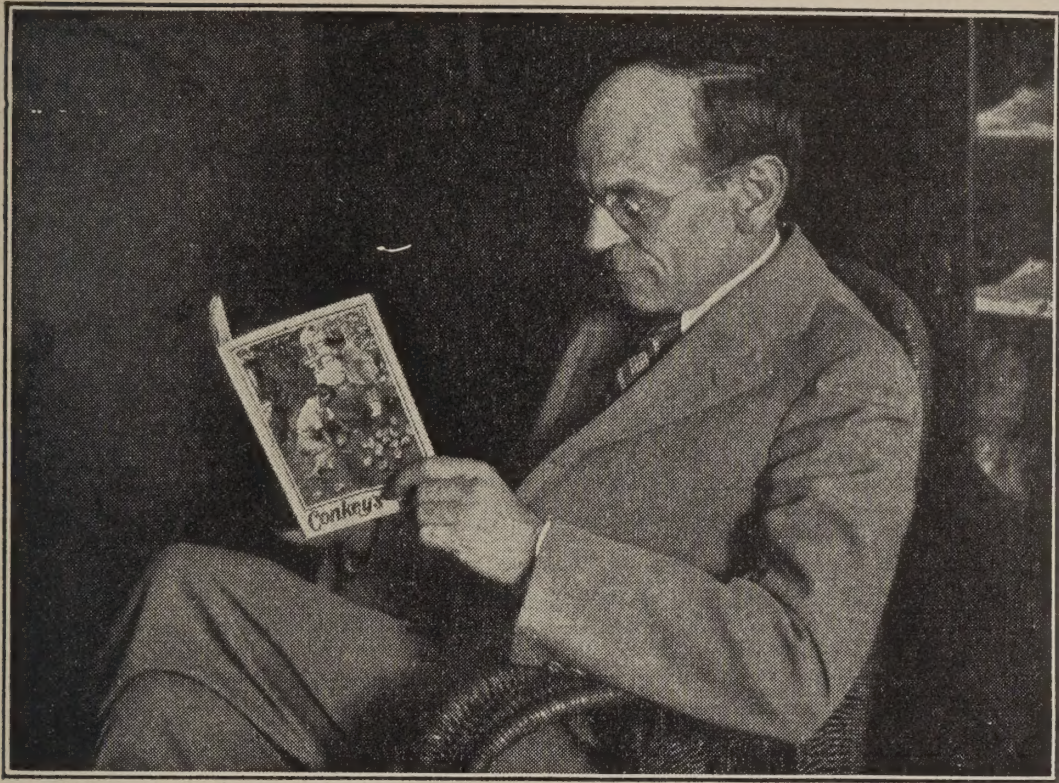


This familiar figure, smiling and confident, symbolizes the faith of Conkey customers won through more than a quarter of a century of fair dealing and the manufacture of honest products.

Published by
THE G. E. CONKEY COMPANY
CLEVELAND, OHIO, U. S. A.

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"Where there is a will," Conkey Shows the Way

***Conkeys* Poultry Book**

25th Revised Edition

IN BUSINESS for over a quarter of a century, it has been and always is, the aim and the policy of the Conkey Company to manufacture feeds and remedies of the highest quality and to render helpful service through its Consultation Department and the Conkey Poultry Book. Each edition of the latter has set forth the latest and best known methods of the times. The constant revision of the book assures the reader of the very latest, practical and workable methods in the care and raising of poultry.

The primary purpose of this book is to give accurate information and advice to those who are already in the poultry business as well as to those who are thinking of entering this interesting and profitable field. Great care is taken to present the facts in their true light rather than to cite isolated cases of outstanding success; to show tables, formulas, etc., which apply to general conditions or flocks rather than to record only the highest or the lowest; in a word, to give honest, conservative information, free from exaggeration—information that can be depended upon and applied for greater poultry profits.

With this idea in mind we present the 25th Revised Edition of Conkeys Poultry Book.

THE POULTRY BUDGET

WHETHER you are a beginner or are an "old hand at the poultry game," we believe you will be interested in any plan which may help you estimate the following: investment, operating expense, profits or loss, etc.

You must, of necessity, have some idea as to "What Will It Take To Get Started? What Can I Expect In Profits? What Does It Cost To Raise a Chick? How Much Feed Will A Hen Eat In a Year?", and many similar questions or you will find yourself hopelessly lost in a maze of hypothetical figures. Just where can you get these facts, free from boast and exaggeration?

Right here in Conkeys Poultry Book you will find the answer to these and many other perplexing problems. Read it carefully; every paragraph carries a vital message that may help you solve your poultry problems.

COST OF EQUIPMENT

Not a luxury but a necessity, good equipment plays an important part with the successful poultryman. It need not be expensive nor elaborate but it should be good. Often home-made equipment is both serviceable and practical. This is a problem each must work out for himself since some are far handier with tools than others. Frequently there are some buildings on the place which can be remodeled at small cost and serve as well as new ones. The cost of new buildings will vary greatly, according to local cost of material, labor, etc. Probably the least expense for new buildings and equipment will figure approximately as follows:

Equipment Cost (For 100 to 125 Hens)

Brooder house 10 x 12 ft. for 300 to 400 chicks.....	\$ 60.00
Brooder stove 500 to 1000 capacity	15.00
Miscellaneous equipment, hoppers, fountains, wire, etc.	10.00
Laying house and equipment—size 20 x 20 ft. for 100 to 125 birds	210.00
Total	\$295.00

**The G. E. Conkey Co.,
Cleveland, Ohio
Gentlemen:**

*Just a few lines on my experience with Conkeys feed.
I bought two hundred chicks from our local hatchery
and received eight extra chicks. I started these chicks on
Conkeys starting mash and fed according to instructions I
received with the chicks. They are three weeks old and I
have two hundred and seven thrifty chicks only losing one.*

*Respectfully yours,
James Morgan,
Wahoo, Nebr.*

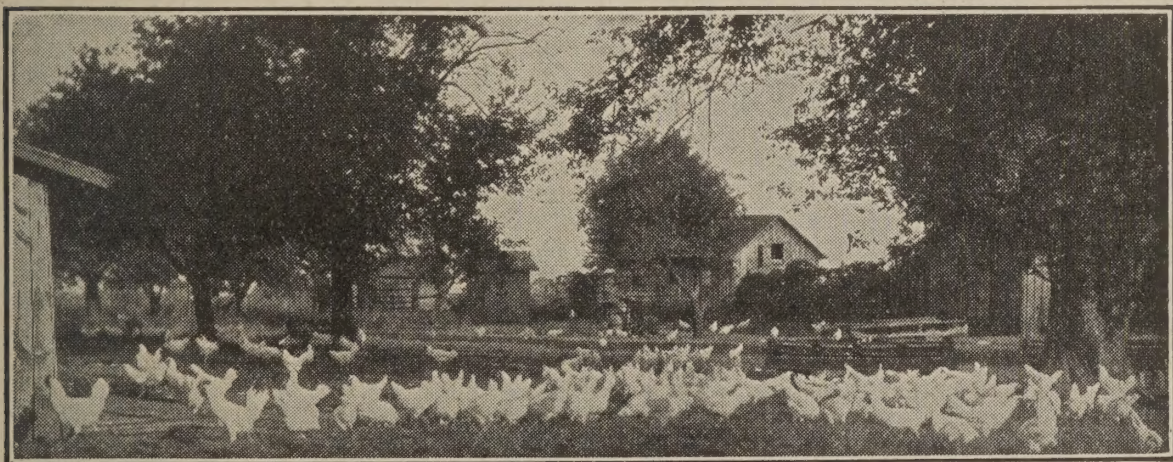
APPROXIMATE COST TO RAISE 135 PULLETS

TO RAISE one hundred fine pullets it is always wise to buy about three hundred baby chicks. Half of these will be cockerels and some will be culls; then there will be some mortality—probably around eight to ten percent. The extra pullets, over and above the hundred needed, are nice to either keep as extras or sell as mature pullets. They can usually be sold easily in the fall at a nice profit above cost.

In the following tables we have endeavored to give conservative figures—figures that are practical and workable. Maximum food consumption is shown and average weight given. It is always easy to pick out heavy, fast-growing birds but a good average is what you must go by; then when you do better than the average, as many of our customers do, it makes you feel mighty good for you will have made more than average profit.

Feed costs and broiler prices are based on average markets over a period of years. The price shown for eggs—Tables 3 and 4—is an average taken from an 18 years' record in Missouri.

Tables 1 and 2 deal with the cost of raising pullets for laying—broilers are a side issue.



Gentlemen:

My pullets are so good I snapped a picture of them and enclose it in this letter to show you. Of course they are raised on Conkeys Growing Mash with Y-O and will be put on Conkeys Gecco Egg Mash with Y-O for our hens have been on Gecco Egg Mash since the first of the year and we never did have such remarkable production before.

We were feeding another good mash up to December but our 500 hens only averaged 157 eggs per day. Then we changed to Conkeys and the eggs jumped in January to 249 per day and 352 per day in February.

The fertility was good too, 96%, and the hatchability was 87%. Records like that and pullets like these mean just one thing to me—Profits. I'm for Conkeys for it makes me the most money. Ohls Poultry Yards and Hatchery, Marion, O.

APPROXIMATE COST TO RAISE 135 MEDITERRANEAN PULLETS

TABLE NO. 1

(Leghorns, Minorcas, etc.)

	Chick Cost	Feed Cost	Credit Sales	Total
Cost of 300 baby chicks at \$13.00 per hundred.....	\$39.00	.....	.....	\$39.00
Cost of 525 lbs. of starting feed (1¾ lbs. per chick for the first six weeks) at 4½c* per lb.....				\$23.63
Cost of 300 lbs. of chick grains (1 lb. per chick for the first six weeks) at 3½c* per lb.				\$10.50
Total feed cost for the first six weeks.....		34.13	.....	34.13
Feed cost per chick for first six weeks is only 11 2/5c. It does not pay to try to save by using an unbalanced, cheap feed.				
<i>NOTE: The above figures are based on the assumption that all of the chicks will live. Probably a 5% mortality will be experienced. If so, the saving in feed will be approximately \$1.50.</i>				
Cost of 1,425 lbs. of growing mash and grains for the second six weeks (4¾ lbs. per chick) at 3¼c* per lb.		46.31	.....	46.31
Total cost of feed the first twelve weeks.....				\$80.44
Total cost of chicks and feed the first twelve weeks.....				\$119.44
Average feed cost per chick the first twelve weeks (if all live).....				27c
Cost per chick to date (10% mortality considered at this time).....				44¼c
<i>NOTE: The above figures are based on the assumption that all of the chicks will live. Probably a 5% mortality will be experienced. If so, the saving in feed will be approximately \$3.00.</i>				
Credit sale of 135 broilers (10% mortality is deducted at this time from 300 chicks) weighing 2 lb. average, at 22c per lb.			59.40	59.40
Cost of 135 pullets to twelve weeks.....				60.04
Cost per pullet to date.....				45c
Cost of 1,823 lbs. of growing mash and grains (13½ lbs. per bird needed from 12 weeks to 5 months of age) at 3¼c per lb.				\$59.25
Cost of oyster shell, grit, litter, etc.				\$6.00
Total cost of feed, oyster shell, etc.....		65.25	.....	65.25
Total cost to raise 135 pullets to laying stage (22 weeks or 5 calendar months)..				\$125.29
Cost per bird				93c

*Note: Above feed prices are not current prices but average prices which have prevailed for several years. The present price on feeds may be either above or below prices shown above, depending on current markets—ask your dealer for current prices.

APPROXIMATE COST OF RAISING 135 AMERICAN OR DUAL PURPOSE PULLETS

TABLE NO. 2

(Reds, Rocks, Wyandottes, etc.)	Chick Cost	Feed Cost	Credit Sales	Total
Cost of 300 baby chicks at \$16.00 per 100.....	\$48.00	.....	.....	\$48.00
Cost of 575 lbs. starting feed (1 11/12 lbs. per chick for the first six weeks) at 4 1/2c* per lb.	\$25.88			
Cost of 300 lbs. of chick grains (1 lb. per chick for the first six weeks) at 3 1/2c* per lb.	\$10.50			
Total feed cost the first six weeks.....	.....	36.38	.....	36.38
Feed cost per chick the first six weeks 12 1/5c. It does not pay to try to save by using poorly mixed, so-called cheap feeds.				
<i>NOTE: The above figures are based on the assumption that all of the chicks will live. Probably a 5% mortality loss will be experienced. If so, the saving in feed will be approximately \$1.50.</i>				
Cost of 1,600 lbs. of growing mash and grains for the second six weeks (5 1/3 lbs. per chick) at 3 1/4c* per lb. ....	.....	52.00	.....	52.00
Total feed cost for chicks the first twelve weeks.....	\$88.38			
Total cost of chicks and feed the first twelve weeks.....				136.38
Average feed cost per chick the first twelve weeks (if all live).....	29 1/2c			
Cost per chick to date (10% mortality considered at this time).....	50 1/2c			
<i>NOTE: The above figures are based on the assumption that all the chicks will live. Probably a 5% mortality loss will be experienced. If so, the saving in feed will be approximately \$3.50.</i>				
Credit sale of 135 broilers (10% mortality is deducted at this time from 300 chicks) weighing 2 1/4 lbs. average at 32c per lb. ....	.....	.....	97.28	97.28
Cost of 135 pullets to twelve weeks.....				39.59
Cost per pullet to date	29c			
Cost of 2,430 lbs. of growing mash and grains (18 lbs. per bird needed from twelve weeks to six months of age) at 3 1/4c per lb.	\$78.98			
Cost of oyster shell, grit, litter, etc.....	\$7.00			
Total cost of feed, oyster shell, etc.....	.....	85.98	.....	85.98
Total cost to raise 135 pullets to laying stage (26 weeks or 6 months).....				\$125.57
Cost per bird	93c			

*Note: Above feed prices are not current prices but average prices which have prevailed for several years. The present prices on feeds may be either above or below prices shown above, depending on current markets—ask your dealer for current prices.

A study of Tables No. 3 and 4 brings out the fact that an American or Dual Purpose hen will eat more feed (about 50c worth) in a year than a Mediterranean hen. If both flocks laid the same number of eggs, the egg income for the Mediterranean Class would be about \$66.00 more than for the American Class hens due to saving in feed. However, the Mediterranean Class hens when finally put on the market usually fail to pay back the cost of raising them. This loss must be deducted from the egg profits.

On the other hand, the American Class hens sell for considerably more money than it costs to raise them and this brings the two flocks to about an equal profit basis when meat and eggs are both considered.

For the sake of convenience in comparing them, the tables show both flocks laying 150 egg averages. It is only fair to add that the Mediterranean breeds will lay an average of from one to two dozen more eggs per bird in a year than the American or Dual Purpose breeds. This will add to the egg income of the Mediterranean birds from \$25.00 to \$50.00 more in egg profits.

For eggs only, the Mediterranean breeds are more popular. However, there are many other factors to consider, such as difficulty of confining the Mediterranean breeds, small eggs, slow broiler sales, etc.

FEED COST AND PROFITS FROM 100 BIRDS

Mediterranean Class—Laying 150 Eggs Each

TABLE NO. 3

	Credit Sales	Feed Cost	Total
Average feed consumed 6 lbs. per bird monthly.			
Total for flock of 100	600 lbs.		
Total for nine months	5,400 lbs.		
Feed cost (5,400 lbs. @ 3c. per lb.)		\$162.00	
<i>Mortality loss of 7% (7 birds lost from the flock at this time) and removing 10 culls leaves 83 birds.</i>			
Feed cost for 83 birds for one month (498 lbs. @ 3c per lb.)		14.94	
<i>Removing 15 culls from the flock at this time and 1% of original flock for mortality leaves 67 birds.</i>			
Feed cost for 67 birds for one month (402 lbs. @ 3c per lb.)		12.06	
<i>Removing 15 culls from the flock at this time and 1% of original flock for mortality leaves 51 birds.</i>			
Feed cost for 51 birds for one month (306 lbs. @ 3c per lb.)		9.18	
Miscellaneous—Oyster shell, grit, etc.		15.00	
Value of 15,000 eggs (150 eggs per bird) or 1,250 dozen at 31c per dozen	\$387.50		
Total cost of feed		213.18	
Total egg income			174.32
Sale of 40 culls (160 lbs. @ 20c per lb.)	32.00		32.00
Cash value of stock on hand (50 hens—200 lbs. @ 20c per lb.)	40.00		40.00
Total income from eggs and stock sold and cash value of stock on hand			\$246.32
Original investment in 100 pullets (\$93.00 and 6% interest \$5.58) should be deducted from \$246.32 to show final net profit.			

The question as to which is the best breed can be argued indefinitely. Each has its good points and success can be achieved with either the Mediterranean or the American birds. It is all a matter of choice, markets, etc.

Another interesting point these tables show is that the gross monthly income from eggs for each flock is \$32.25 while the feed expense is approximately \$18.00 for the Mediterranean breeds and \$24.00 for the American breeds.

To give you an idea of what to expect from an average flock of one hundred good hens properly housed and properly fed, Tables 3 and 4 are shown. There are thousands of poultrymen who get far more for their eggs than the price given here. Finally, there are many, many flocks which average 175 to 200 eggs per bird. Remember, the highly successful man or woman in any business, climbs far above the average.

In the poultry industry, wonderful opportunities are present for the wide-awake man or woman who is willing to give it time and thought. We have shown you conservative figures—you can do much better than this when you know how. It is not uncommon for poultrymen to make a \$2000.00 annual profit from one thousand birds—some make much more.

FEED COST AND PROFITS FROM 100 BIRDS

American Class—Laying 150 Eggs Each

TABLE NO. 4	(Rocks, Reds, Etc.)	Credit Sales	Feed Cost	Total
Average feed consumed, 8 lbs. per bird monthly.				
Total for flock of 100 for one month 800 lbs.				
Total for nine months 7,200 lbs.				
Feed cost @ 3c per lb. ....	.....		\$216.00	.....
<i>Mortality loss of 7% (7 birds lost from the flock at this time) and removing 10 culls leaves 83 birds.</i>				
Feed cost for 83 birds for one month (664 lbs. @ 3c per lb.) .....	.....		19.92	.....
<i>Removing 15 culls from this flock at this time and 1% of original flock for mortality leaves 67 birds.</i>				
Feed cost for 67 birds for one month (536 lbs. @ 3c per lb.) .....	.....		16.08	.....
<i>Removing 15 culls from the flock at this time and 1% of the original flock for mortality leaves 51 birds.</i>				
Feed cost for 51 birds for one month (408 lbs. @ 3c per lb.) .....	.....		12.24	.....
Miscellaneous—Oyster shell, grit, litter, etc.....	.....		15.00	.....
Value of 15,000 eggs (150 eggs per bird) or 1,250 dozen @ 31c per dozen	\$387.50			.....
Total cost of feed			279.24	.....
Total egg income				108.26
Sale of 40 culls (240 lbs. @ 27c per lb.)	64.80			64.80
Cash value of stock on hand (50 hens 300 lbs. @ 27c per lb.)	81.00			81.00
Total income from eggs and stock sold and cash value of stock on hand.....				\$254.06
Original investment in 100 pullets (\$93.00 and 6% interest \$5.56) should be deducted from \$254.06 to show final net profit.				

POULTRY HOUSES AND EQUIPMENT

PROVIDE a good laying house for the flock for, though most hens will lay well during the spring and summer, the laying house has much to do with their production the other seven to nine months of the year. Often there is a building on the premises that can be remodeled and made into a very practical poultry house. The more economical the building—within the bounds of reason—the more money the beginner will have to spend for equipment and better breeding stock. Money invested in the latter will bring a larger and quicker return than any other poultry investment.

SIZE OF HOUSE

The greater the floor area the less space is required per bird—up to units of one hundred—for each individual has more space over which to exercise. It is best to make the house square up to a 20' x 20' size and thereafter add 20' units to each side.

For 10 birds or under, 10 square feet per bird should be allowed. Up to 20 birds allow 8 square feet per bird. For 30 birds allow 6 square feet per bird. For 40 birds allow 5 square feet per bird and for 100 birds allow 3 to 4 square feet per bird. This applies particularly to the Dual Purpose or American Class. If you plan raising one of the Mediterranean breeds, three-fourths as much space per bird will be sufficient.

LOCATION OF HOUSE

Of course, the site of the house should be on well drained soil. Dryness and sunlight are absolutely essential. A southern slope is ideal. If the drainage is poor where you must build, put down several loads of small stones and tamp in loam or clay over all. Slope on the outside, away from the bottom of the building, to turn the surface water away. This is particularly necessary if you plan to have a dirt floor.

Sunlight is another necessity for health and heavy egg production. Always have the building facing south if possible and since more sun will reach the interior of the house from the South, most of the windows and openings should be placed in the south wall of the building.

TYPE OF HOUSE

Though there are many different styles of poultry houses the majority fall under the Shed Roof Type. Aside from economy of construction the Shed Roof Type poultry house offers wonderful possibilities for thorough and adequate ventilation. It can be kept very warm and dry in the winter and yet cool and comfortable in the summer. The house is made to allow thorough ventilation by the open front and at the same time gives a warm roosting closet at the back, free from drafts.

The Conkey Laying House Plan is described in the following pages and embraces many practical ideas. Study the pictures and send for blue print (10c) if you want to build one along this line.

VENTILATION

A bird, for its size, consumes more oxygen than any other living creature. Having no sweat glands it "perspires" through its breath. With the fowl's temperature at 106 degrees, the breath coming into cool air condenses quickly. Constant flushing of the air, therefore, is necessary to carry out this moisture or in cold weather a frost forms on the inside walls, then thaws out during the day and makes the house damp. A dry cold does less damage to fowls than a moisture-laden, freezing temperature.

FLOORS

Poultry house floors are made of dirt, wood or concrete. Dirt floors are difficult to keep dry and smooth; wooden floors often become damp and warped, while concrete floors, built the old way, are expensive. Built the new way cement or concrete floors are inexpensive, dry, sanitary and because they are right on ground which is always protected they are warm in winter and cool in summer.

Simply smooth and tamp solid the dirt floor, then lay cheap tar paper over the surface and upon this paper spread cement about 1½ inches deep. The tar paper stops earth moisture from contacting the cement and will last a lifetime. If the cement should crack no harm will result and the money saved by putting down this kind of a floor can be used to good advantage in making the building above more tight and comfortable.



Mr. and Mrs. Eric Johnson's beautiful poultry plant along Rock River, Beloit, Wis. They feed all their birds Conkeys and how those hens do shell out the eggs! Mr. Johnson says he tried another starting feed but "never again"; claims his chicks improved 50% in appearance in a week after going back to Conkeys.

The "good book" says we should not be envious, but how can one help it when one sees such a charming home and delightful surroundings?



Gentlemen:

Out of 3,470 chicks on hand which are 3½ to 6½ weeks old my loss has been less than 5½%. There is nothing I can say that will talk as loud as the feed itself. I can see now it's what is in the feed that makes every one who tries Conkeys refuse every other feed. Conkeys Vitalized mashers are sure-enough money makers for the poultryman and that's what really counts.

KRAUSE BROS.,
Beloit, Wisconsin.

DROPPINGS BOARD

The idea of the droppings board is two-fold. First, it catches the droppings and keeps them from contaminating the litter below, thus enabling the birds to utilize all available floor space. Second, it stops cold draft from striking the birds from underneath. When building this droppings board the boards should run from front to rear. This will help a great deal in cleaning.

ROOSTS

The roost should be built so that birds will roost in rows from front to rear. This gives better ventilation and also makes it easier to clean the droppings board. Screening the roosts prevents birds from picking up eggs of intestinal worms that have been passed in the droppings and, too, it keeps their feet cleaner. This reduces the number of dirty eggs. Another value the screen has is that it keeps the birds from trampling and packing the droppings on the droppings board and this also helps to make cleaning a simple matter.

The roosts should be hinged to the wall with a heavy hasp and wooden pin—see figure No. 5-B. This plan makes it easy to move the roosts, should sickness necessitate an extra thorough cleaning.

Nests should be made in sections of 4 or 5 feet. They can be placed on the wall or under the droppings board.

BROODY COOP

Build broody coops in one corner of the roosting space. Have three of them the size shown in figure No. 5. Note particularly the ease with which broody hens can be fed and watered. With a battery of broody coops like those shown in figure No. 5 it is a simple matter to break up broody hens at once.

Conkeys LAYING HOUSE PLAN

MATERIAL NEEDED

FOUNDATION

30 sacks cement; 5 rolls 1 ply tar paper; 8 anchor bolts $\frac{1}{2}$ "x8"; stone and sand.

LUMBER

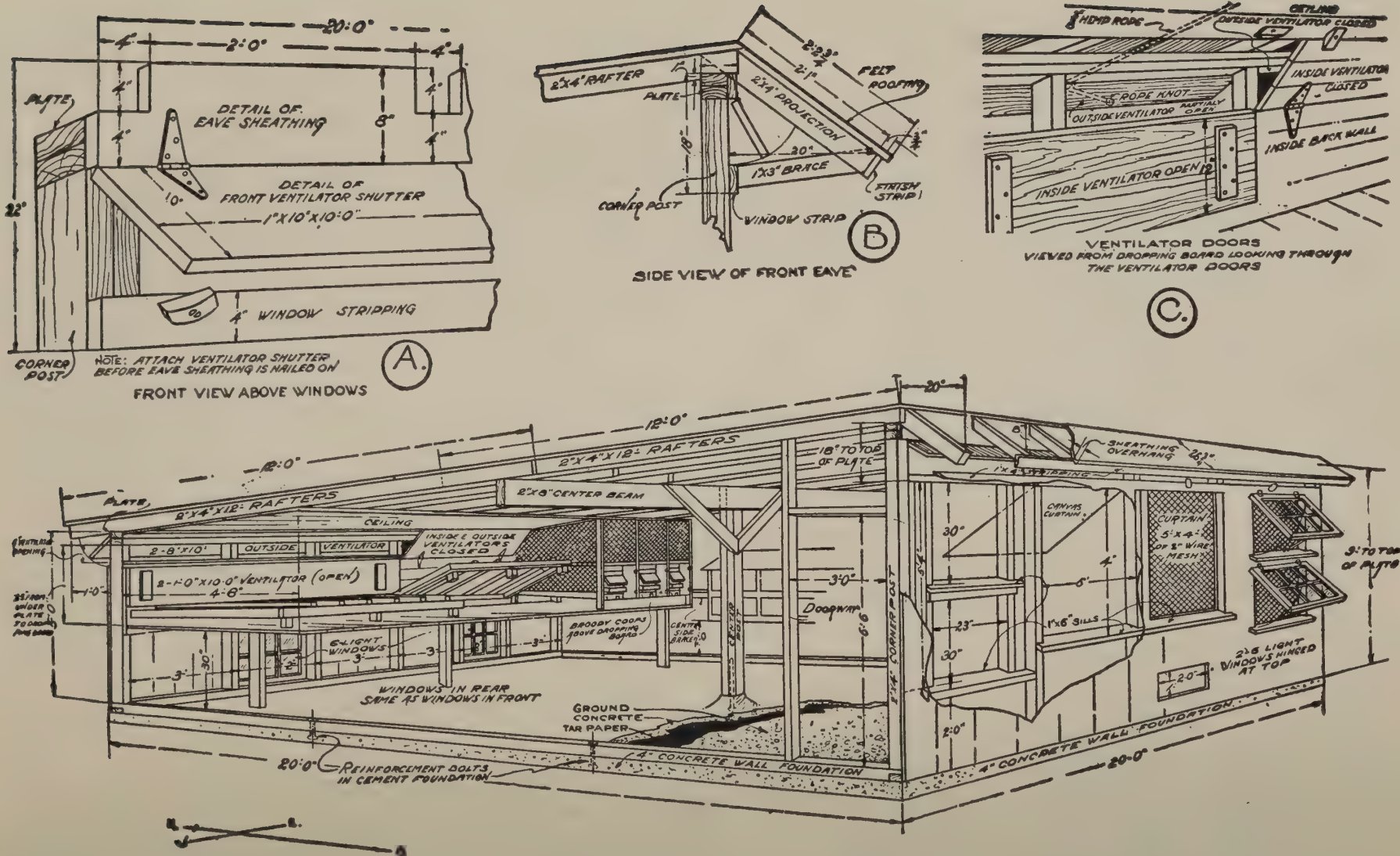
8 Pieces 4"x4"x10' (Sills—can use 16 pieces 2"x4"x10' if desired)
 50 Pieces 2"x4"x10' (Framing and roost; nests and dropping board supports)
 20 Pieces 2"x4"x12' (Rafters)
 2 Pieces 2"x8"x10' (Center beam)
 18 Pieces 1"x2"x10' Dressed Lbr. (Broody coops and curtain frames)
 14 Pieces 1"x4"x10' Dressed Lbr. (Finishing roof and top front windows)
 12 Pieces 1"x8"x10' Dressed Lbr. (Nests)
 3 Pieces 1"x6"x10' Dressed Lbr. (Nests) (Simple partition nests)
 5 Pieces 2"x4"x12' Dressed Lbr. (Roost frames)
 5 Pieces 2"x2"x10' Dressed Lbr. (Roosts)
 800 ft. B. M. Shiplap (Siding, etc.)
 700 ft. B. M. Rough Lumber (Roofing and droppings board)
 2 Curtain holders—See Brooder House Plan.

HARDWARE

Nails: 5 lbs. 4d; 40 lbs. 8d; 20 lbs. 10d; 20 lbs. 20d; 3 lbs. small staples.
Wire: 250 sq. ft. 2" mesh poultry netting, preferably 5' width.
Windows: 2 sash 24"x24" for back; 4 sash 24"x30" for front. Galvanized iron for window arrestors—See Brooder House Plan.
Roof: 6 rolls 3 ply roofing. (Also 5 rolls 1 ply tar paper mentioned under foundation.)
Hinges: 18 Pr. 3" strap hinges for windows, ventilators, etc. 1 Pr. 6" strap hinges for door. 6 Pr. 1" steel butts for broody coop doors and hopper covers. 4—8" hasps and 4— $\frac{3}{16}$ "x5" bolts for roosts. 3 Pr. hooks and eyes for roosts and door. 8 anchor bolts $\frac{1}{2}$ "x8"—mentioned under foundation.
Pulleys: 4 single and 1 double pulley for ventilators.
Rope: 50'— $\frac{3}{8}$ " hemp rope for ventilators.
Miscellaneous: 40 sq. ft. canvas.

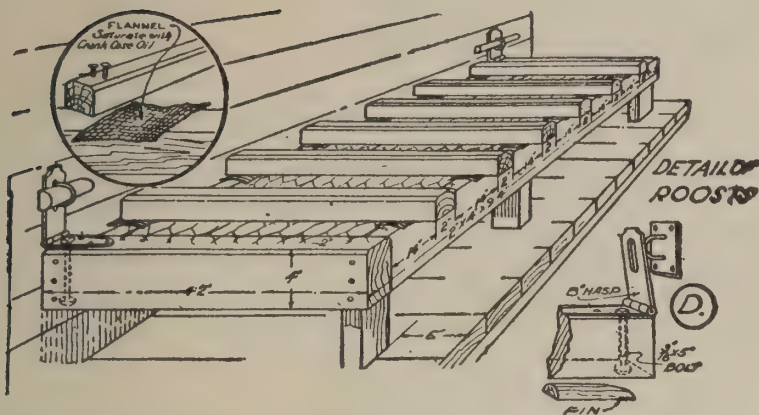
SUGGESTIONS

Foundation: Set anchor bolts heads down, $3\frac{1}{2}$ " in foundation.
Floor: Level the ground, tamp down firm, then spread 1 sheet of tar paper down at a time and cover with cement. Use roof paint to seal tar paper joints and make a 3" lap.
Ventilators: Be sure to hinge the top front ventilators before nailing sheeting on the front eaves or great difficulty will result later in putting on the hinges. If you plan to build, send 10c in stamps and get a large print 14"x24" of this Laying House. You will find it a great help.



PLAN OF LAYING HOUSE

Figure No. 4—Conkey Laying House. For details see pages 7 to 10. Blue print 10c



Explanation of Plan of Conkey Laying House

A. Front View Above Windows.

B. Side View of Front Eave.

C. Ventilator Doors.

D. Roosts Hinged to Wall.

E. Ventilator Harness. See pages 10 and 11 for fuller description. For material bill see page 13. Blue print mailed for 10c.

(BIRDSEYE VIEW)
VENTILATOR
HARNESS

(E.)

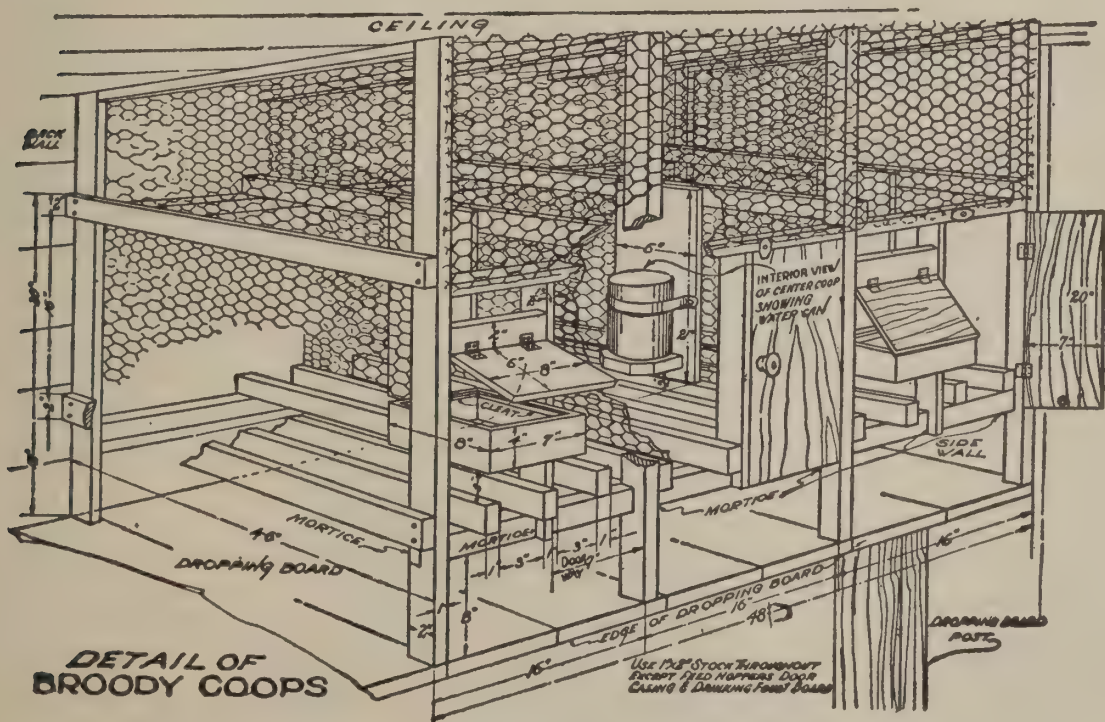
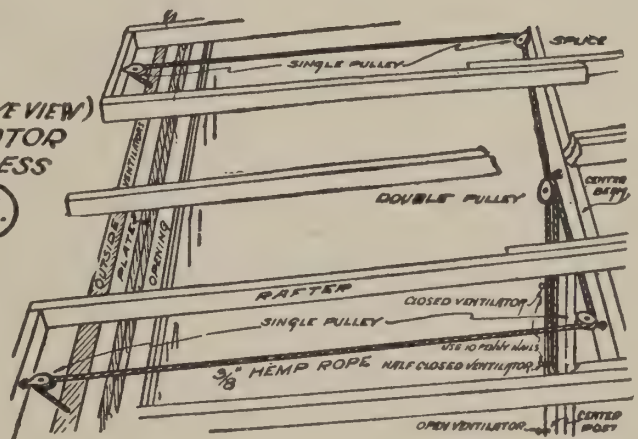


Figure No. 5

POPULAR BREEDS

AMERICAN CLASS—There are more than a dozen classes of poultry and many breeds and varieties listed under these classes, but in the United States the American and Mediterranean Classes are the most popular. The American Class is also sometimes called the General Purpose or Dual Purpose Class. This is because the size and conformation of the bird makes it adaptable for either heavy egg production or for high quality meat. The breeds and varieties in this class are given below.

Plymouth Rocks—This breed has seven recognized varieties. They are: Barred, White, Buff, Silver-Penciled, Partridge, Columbian and Blue. Except in color the seven varieties are identical. Their weight should be as follows: Cock $9\frac{1}{2}$ -lbs.; cockerel 8-lbs.; hen $7\frac{1}{2}$ -lbs.; and pullet 6-lbs. Generally speaking, they mature at 6 to 7 months.

White Wyandottes—The eight varieties composing this group are: Silver-Laced, Golden-Laced, White, Buff, Black, Partridge, Silver-Penciled and Columbian. Their standard weight calls for 8-lbs. for cocks; $7\frac{1}{2}$ -lbs. for cockerels; $6\frac{1}{2}$ -lbs. for hens and $5\frac{1}{2}$ -lbs. for pullets. Wyandottes usually mature at about 6 months of age.

Rhode Island Reds—There are just two varieties—Single Comb and the Rose Comb. Their weight should be $8\frac{1}{2}$ -lbs. for the cocks; $7\frac{1}{2}$ -lbs. for the cockerels; $6\frac{1}{2}$ -lbs. for the hens and $5\frac{1}{2}$ -lbs. for the pullets. About $5\frac{1}{2}$ to 6 months' time is required for them to mature.

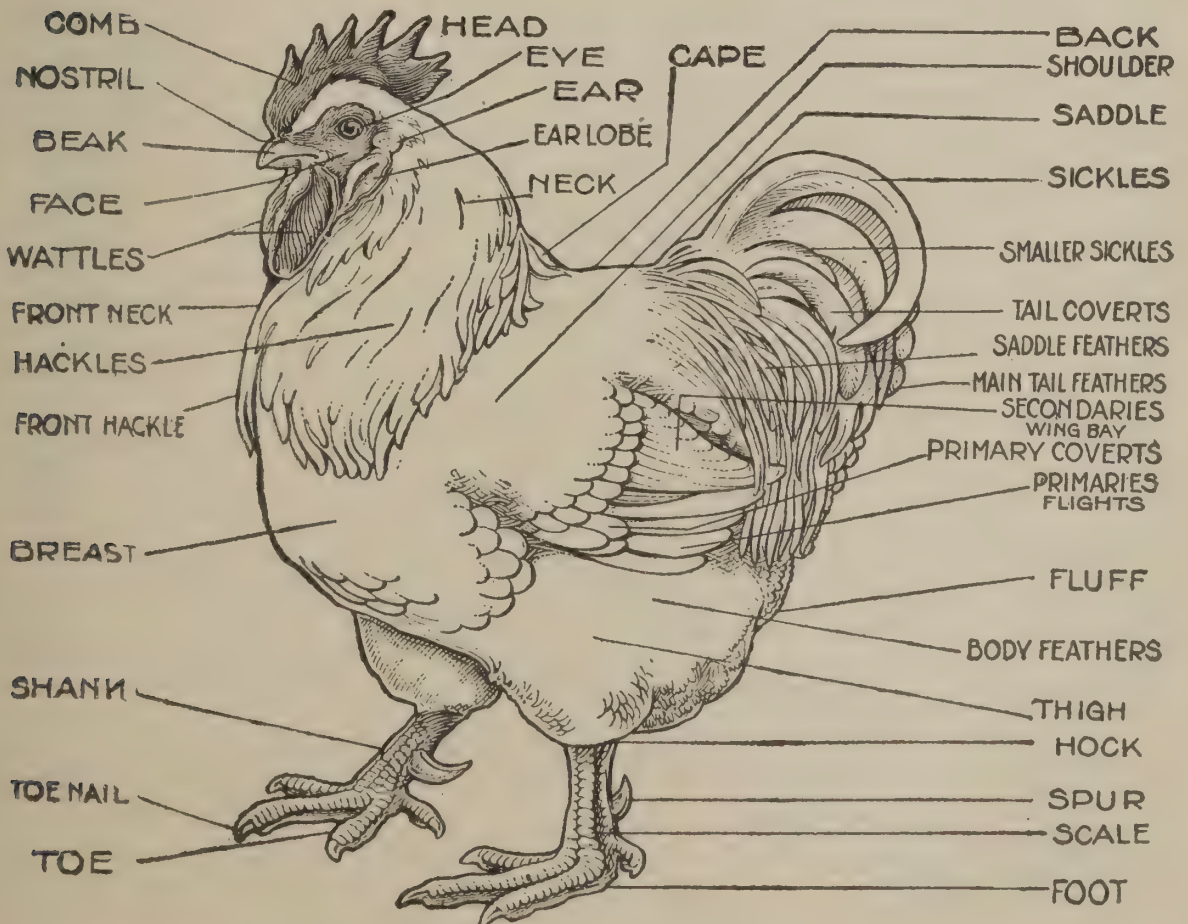
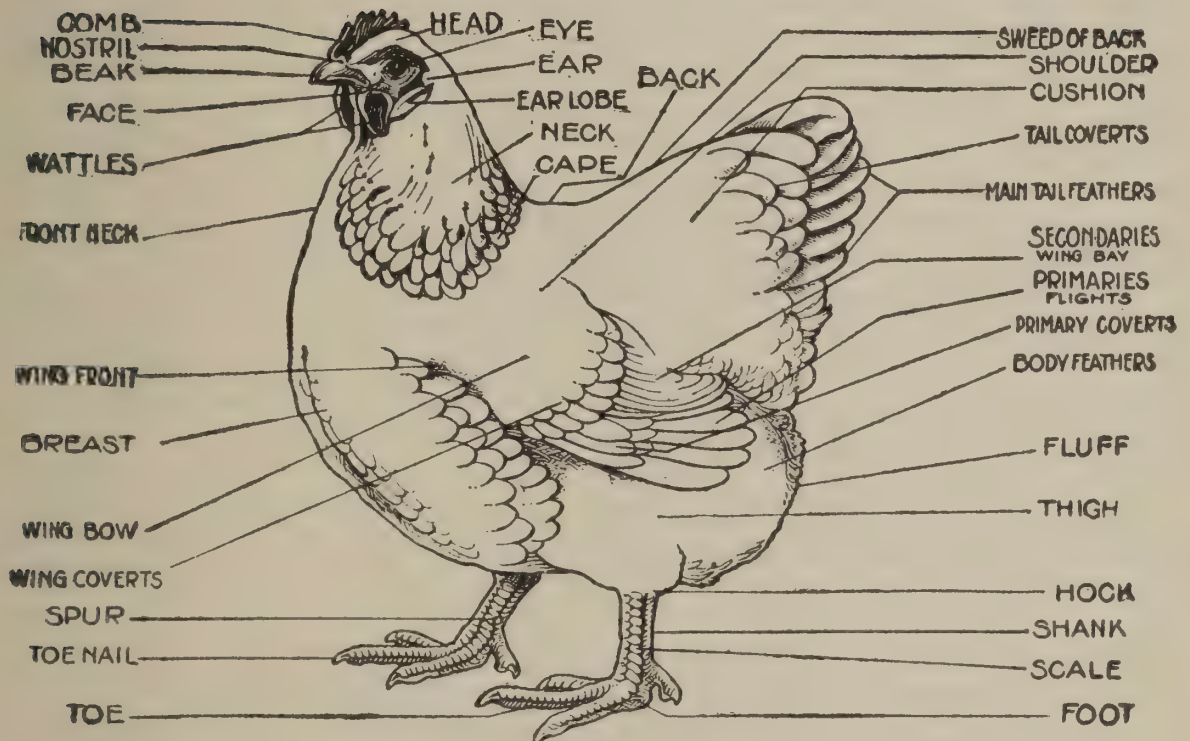
Other Breeds that belong to the American Class are: Javas, both Black and Mottled; Dominique; Buckeye; Rhode Island White; Chantecler and Jersey Black Giant.

Mediterranean Class—This class has long been popular as the leading egg-producing group. Breeds in the Mediterranean Class are smaller than either the Asiatic or American Classes and this fact makes them mature earlier and begin laying sooner.

Leghorns—Are the most popular Mediterranean breed, especially the White Leghorn, though many fanciers raise Brown (both light and dark plumage, and Single and Rose Comb) Buff, Black, and Silver. In size, leghorns should weigh as follows: cocks $5\frac{1}{2}$ -lbs.; cockerels $4\frac{1}{2}$ -lbs.; hens 4-lbs.; pullets $3\frac{1}{2}$ -lbs.

A leghorn is the typical egg producer and is the breed used on most of the big commercial poultry plants when birds are kept for eggs only. Discrimination against leghorns and other Mediterranean breeds as meat birds is on account of the small size rather than quality of the meat. As a rule, the poultryman raising birds of the Mediterranean Class suffers a loss when marketing broilers and old stock, as compared to the poultryman raising birds of the American Class.

DIAGRAM OF FOWLS



TO OFF-SET this loss the owners of Mediterranean breeds have birds that mature earlier, thus requiring less feed. They also are less troublesome about broodiness. As to production, taken as a class, the Mediterranean breeds at the present time seem to outlay breeds of the American Class; however. American breeds have repeatedly demonstrated laying ability equal to the Mediterranean breeds when the former are properly bred. It is largely a matter of markets, management and fancy as to which breed is best and this is a problem each individual must work out for himself.

BREEDING FOR EGG PRODUCTION

It is quite probable that nine out of every ten persons who read this book know that, "Like produces like" as applied to live stock breeding and, in fact, all plants and animals, but in applying this natural law it must be realized that the bad or undesirable qualities reproduce themselves as do the good or desirable qualities. The two-fold object of breeding, therefore, is to eliminate the undesirable qualities and to strengthen the attractive or profitable ones. The subject is too technical—demands too much space—for us to discuss in detail in this book, but it is thoroughly cared for in our special bulletin "Mating Domestic Fowls To Secure High Egg Production," (bulletin No. 110). Be sure to send for a copy—it is free.

WHEN TO BUY OR HATCH THE CHICKS

Just what is the proper date to buy or hatch chicks depends upon local climatic conditions and the breed, but to insure vigor, size and productiveness in pullets, always hatch them early. For the Northern and Central States the first hatch should be out by the last week of March or the first week of April. In the Gulf States the hatching season is from September to April. Early hatched chicks make more rapid gains and the pullets lay during the winter instead of the following spring when the market is low. See page 32 for rapid growth.

The number of chicks needed is about 3 chicks for every pullet you plan to keep for laying. That is, suppose you had 300 pullets last fall: if you culled as you should, you will have only about 100 to 150 yearling hens left by the following fall. To replace the ones sold you will need to start with 3 chicks for each bird sold or lost during the year. See tables 1 and 2—pages 6 and 7.

After you have accounted for your losses, sold the cockerels and culled the pullets, you should have quite a number of extra birds. Two to five percent mortality in baby chicks is not the rule, so you must allow for heavier losses. Also remember it rarely pays to keep hens after the second year unless they have been trap-nested and have proven their worth. It is best to have too many pullets at the beginning of the laying year than too few for you can easily sell some if you have more than you need.

SELECTING THE BREEDERS

It is seldom a good plan to use eggs for hatching from all fowls in the flock. To insure good, vigorous chicks mate special breeding pens. Send for Conkeys special bulletin No. 110 on "Mating To Secure High Egg Production."

SELECTING HATCHING EGGS

EVEN when the breeding stock has been wisely chosen it is advisable to carefully select the eggs. This not only enhances the possibility of a good hatch, but has some effect upon the kind of eggs that will be produced by the pullets raised. Select upon the following characteristics: Size, shape, color, shell.

Size—Is important as indicated in the picture shown herein.

Shape—Eggs for incubation should be uniform in shape. Exceptionally long, rounded or short eggs are objectionable as also are malformed eggs. They are difficult to hatch and sometimes the offspring produce eggs of the same type.

Color—White eggs should be chalk white. Brown eggs should be of uniform color. Extremely dark ones are difficult to candle and, as a rule, do not hatch as well as lighter ones due to excessive thickness of shell.

Shell—Strong shells are very desirable. To avoid missing defects which do not show on the outside, candle the eggs. The use of Conkeys Y-O or cod liver oil makes strong-shelled eggs.

Care Of Hatching Eggs—Collect eggs for hatching at least three times a day. Place in a room where the temperature is between 50 and 60 degrees. Turn eggs at least once daily. If they are placed in ordinary fillers the small end should always be down. There is no practical advantage in washing slightly soiled eggs and eggs that are badly soiled should not be set. However, as a precaution, slightly soiled eggs are sometimes wiped with a cloth dampened with a 1% solution of Conkeys Nox-i-cide. Although there does not appear to be any distinct loss of vitality in week-old eggs, deterioration is rapid after that time.

STOP LOW HATCHING

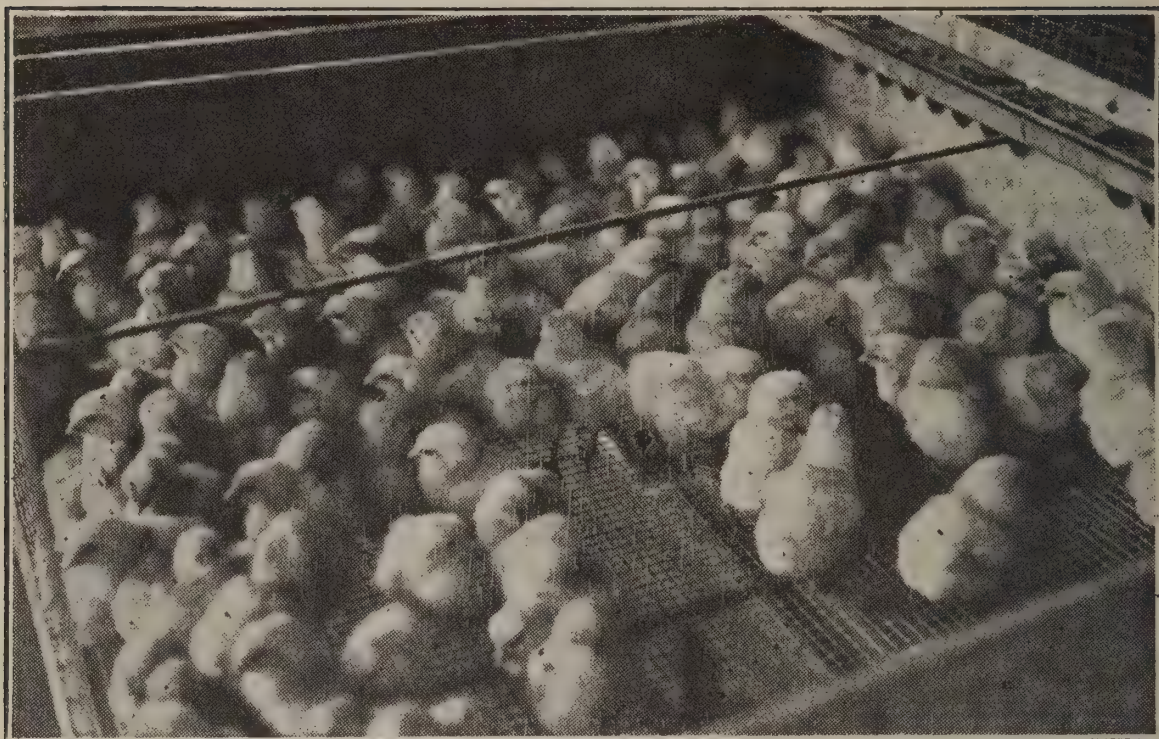
Feeding yeast with cod liver oil, in order to furnish better eggs for hatching is rapidly becoming the practice of all big hatcheries, since the advent of Conkeys Y-O. It is so simple to mix this powdered form of yeast and cod liver oil with the mash and so much more sure in results because it keeps potent.

Period Of Incubation—The period of incubation varies with different species of poultry, as shown in the following:

Hen eggs 21 days; Pheasant eggs 22-24 days; Duck eggs 28 days; Duck (Muscovy) eggs 33-35 days; Turkey eggs 28 days; Peafowl eggs 28 days; Guinea eggs 26-28 days; Goose eggs 30-34 days; Pigeon eggs 17 days and Ostrich eggs 42 days.

The period of incubation also varies somewhat with conditions. A hatch may run one or two days over in some cases, due to an accident during incubation or to a low temperature, while on the other hand it may come off earlier.

With the wide spread development of the hatchery industry it is now, generally speaking, more economical to buy chicks than to attempt to hatch them with hens or small incubators.



*The G. E. Conkey Co.,
Cleveland, Ohio*

Lexington, Kentucky

Gentlemen:

We have reared to three weeks old and older, a few over 380,000 baby chicks. We have used the Conkeys Buttermilk Starting Feed, and we want to take this opportunity to let you know that we have had a most successful season. Our loss will not run quite to 3½ per cent.

Very sincerely yours,

KENTUCKY HATCHERY

D. D. Slade, Owner.

CARE AND FEEDING OF BABY CHICKS

There can be no doubt but that the most vital stage in the entire life of the chicken is the brooding period. You must grow good, strong, robust, healthy chicks if you expect to be successful with the mature stock. Therefore, when the big rush of the chick season comes, do not let it go by and find you still raising chicks by the old expensive and tiresome "old hen" method. Pages 30 and 31 show how to build a brooder house that is very practical. If you cannot at present build a new house, surely there is some old building on the place you can change into a brooder house.

HOW MANY CHICKS TO A BROODER?

The number of chicks to keep under a brooder will vary with the number of chicks desired, the size of the brooder and, in addition, the experience of the person doing the brooding. For the inexperienced,

not over 300 chicks should be started together. Generally speaking, chicks brooded in small numbers do better than those brooded in larger numbers.

The Conkey slogan is. "Small flocks well cared for are always more profitable than large numbers of neglected chicks." However, there are thousands of big poultrymen who brood large numbers of chicks in mammoth brooder houses. If you have a portable brooder house be sure to move it to new and unused ground that is well drained and where grass will grow abundantly. If the house is permanently located, do not neglect to plow or dig up the runs and plant to some quick growing crops such as oats.

Clean and spray the brooder house with Conkey's Nox-i-cide. Replace broken window-panes, repair torn glass-cloth, renew the canvas curtains in the front of the house, put up dark colored curtains at the windows so that you can darken the building at will and examine the ventilators to be sure they are not warped out of shape. They should fit up tight and snug. Nail boards on a slant around the inside of the house close to the floor, up against the wall—pages No. 30 and 31—to prevent chicks crowding in against the wall, and stretch wire across the corners of the building for the same purpose.

A wide circle of hardware-cloth, baby chick wire or an 18 inch piece of roofing should be run around the hover to keep chicks from straying away from the heat before they have learned where it is. Sand, cut straw or cut alfalfa should be scattered one to two inches deep over the floor. Alfalfa hay is best if obtainable. It is also very important that the brooder house be large enough for the chicks to get away from the hover to a cooler temperature when they desire. Close confinement in too warm a room results in wobbly legged chicks with no vitality.

Confine chicks close to the house until they learn where they belong and where the heat is. After this allow them to range at will. Set up the stove several days before the chicks arrive and be certain it is working well. If new, be sure you understand it. If it is old, be sure the thermostat is working well.

Be sure that the building is thoroughly dry and warm before the chicks are placed therein and then guard them night and day when the weather is bad to be certain the heat is sufficient. Sacks or newspapers hung over the wire screen that is used to circle the brooder will help a great deal to hold the heat around the hover during an unexpected cold spell.

Keep the temperature under the hover about 95 degrees during the first 5 to 6 days then gradually reduce the heat as the chicks become stronger. Don't try to heat the whole room. Too much heat is thought to be one cause of bare-backed chicks. Keep the house well ventilated and if possible evaporate water to supply more moisture in the air. Don't let the house get too dry.

CHOICE OF FEED

OF COURSE, we want you to choose Conkeys (the original) Butter-milk Starting Feed because it surely does "Fill the Bill" and you know, it now comes to you vitalized with Conkeys Y-O.

Not only is it complete in every detail in the way of pure, clean, high-class ingredients, which are scientifically balanced and perfectly blended so that every ounce of the feed goes to promote even and rapid growth, but in addition, it carries a generous quantity of yeast and cod liver oil in the form of Conkeys Y-O. This wonderful product completely vitalizes the feed with an abundance of A, B and D vitamins—the essential vitamins needed to promote life, growth and profit.



Conkeys Y-O is a vitamin product which is the result of a patented process of sealing cod liver oil on brewers' yeast and other ingredients in a way which prevents the A and D vitamins in the cod liver oil from becoming impotent. Ordinarily, cod liver oil begins to oxidize and lose its vitamin potency soon after being exposed to air. In making Y-O we use the best and most potent cod liver oil. We do not use any substitutes. Y-O will hold vitamin A and D potency for a long time.

Vitamins are now recognized by all authorities as the real controlling forces of bird and animal life. Without them vitality is lost, diseases appear and death results. Literally billions of chicks have died because of this one lack in their feed. Many have died of rickets (leg weakness)—Y-O would have saved them. Because of these facts we say to you, "A great chick feed, now even better than ever."

LESS THAN 3 LBS. FEED IN 6 WEEKS

Statistics show that a chick eats less than 3 pounds of feed during the first 6 weeks—see Tables No. 1 and 2 in this book. Since part of this will be chick grains the total investment in the starting feed, per chick, is exceedingly small. The possible margin of saving in first cost through buying a cheap chick starter or mixing your own would probably be less than a cent per chick.

Against this you would have less vigor and vitality, slower growth, greater susceptibility to diseases and almost certainly a heavier mortality. The loss of just one more chick out of each hundred will turn a possible saving on the first feed cost into a direct loss, while a heavy mortality would mean a further loss and fewer pullets next fall or

possibly another brood to be raised. A second brood would mean a greater investment to raise the same number of birds and a smaller profit would be realized too, because late maturing pullets do not lay when eggs are highest.

It just does not pay to experiment with baby chicks—play safe—use Conkeys Buttermilk Starting Feed with Y-O the first six weeks. It is already vitalized with Conkeys Y-O—no need to add cod liver oil, yeast or regulators of any kind.

Ingredients—Buttermilk, Corn Meal, Corn Feed Meal, Oat Meal, Wheat Middlings, Raw Bone Meal, Blood Flour, Meat Meal, Crude Milk Albumen, $\frac{1}{2}\%$ Calcium Carbonate, Salt $\frac{1}{2}\%$, Y-O (Cod Liver Oil, Yeast, Soybean Oil Meal, Wheat Middlings, $\frac{1}{4}\%$ Red Oxide of Iron).

Analysis—Crude Protein, 15.00%; Crude Fat, 4.00%; Crude Fibre, 5.00%; Nitro. Free Extract, 59.00%; Carbohydrates, 64.00%.

*The G. E. Conkey Company,
Cleveland, Ohio.*

Gettysburg, Penn.

Dear Sirs:

Just a word to let you know that when anyone starts to feed Conkeys Poultry Feeds that he has found the road to success in the poultry world. Now I am a raiser of pure-bred Rhode Island Reds and Partridge Plymouth Rocks and take great pride in them.

I have a neighbor who raises White Leghorns on a large scale, by the hundreds. He has been raising them on another feed and had luck in not losing many, but the pullets don't show the size and when the chicks are eight weeks old they don't show weight.

I had fed that feed, but this spring I changed to "Conkeys" and got my chicks two weeks later than my neighbor. But at seven (7) weeks with my chicks and nine (9) weeks his chicks, my chicks are as large and some larger. In other words, he fed his chicks two weeks for nothing. Now I think that eyes don't lie, so the other man is going to change to "Conkeys." I forgot to state that both had Rhode Island Reds, so you see that feed is a great factor in the chicken world.

I am a breeder of Pedigreed White Flemish Giant Rabbits and I would like to have you send me your circulars on Y-O for rabbits and Conkeys Rabbit Ration with Y-O, because I believe Conkeys feed will have as much to do with getting better quality in my stock.

Thanking you for making such great feed, I am closing a booster for "Conkeys" everywhere and at all times.

Yours truly,

Mr. John W. Lowe



The G. E. Conkey Co.
Cleveland, Ohio
Gentlemen:

La Mars, Iowa

This spring on April 18th I bought 1090 chicks and decided to feed them Conkeys Starting Mash. I filled 10 feeders with the mash and let them eat all they wished, as soon as I got them from the hatchery.

At the age of six weeks I still had 1044 chicks left. I think this is a remarkable record.

I certainly am a strong booster for Conkeys Feeds and will start all my baby chicks on it again next year.

Yours truly,

J. A. Schultz

HOW TO FEED YOUR BABY CHICKS

There are many methods of raising chicks but it is best to put the feed before them as soon as they are hatched and let them help themselves. Be sure every chick has an opportunity to get to the mash. Allow one inch hopper space per chick and keep the hoppers full all the time. Placing boards along the hoppers the first few days helps chicks to reach the feed.

Grit—Give the chicks fine grit as soon as they will pick it up, but don't let them fill up on it.

Water—Give them plenty of clean, luke-warm water.

Green Food—After six days give finely cut sprouted oats, tender grass or similar green food. If weather permits get them out on the ground after the dew is gone—see "Gapes" under "Diseases."

Chick Grains—When chicks are two weeks old it is time to begin feeding Conkeys Chick Grains. Scatter a few handfuls of grain in the litter morning and night and gradually increase the amount until by the time the chicks are five weeks old they are eating as much grain as mash. You can then safely fill hoppers with grain and keep both mash and grain before them all the time.

FEEDING CHICKS ALL MASH

BECAUSE of the simplicity of feeding, some people prefer the All Mash system of feeding baby chicks. If you desire to raise your chicks the "All Mash Way," you will be delighted with Conkey's All Mash Chick Ration with Y-O. It is a completely balanced feed—all you have to do is to put it in hoppers and allow the chicks to eat all they want. It contains all the elements needed by the chicks in just the right amounts such as protein, starches, sugars, fats, minerals and, most important of all, Conkeys Y-O.

When feeding a mash containing Y-O you are always assured of strong, potent A, B and D vitamins. With Conkeys All Mash Chick Ration with Y-O before your chicks, they can be raised in a building having no sunshine or daylight at all.

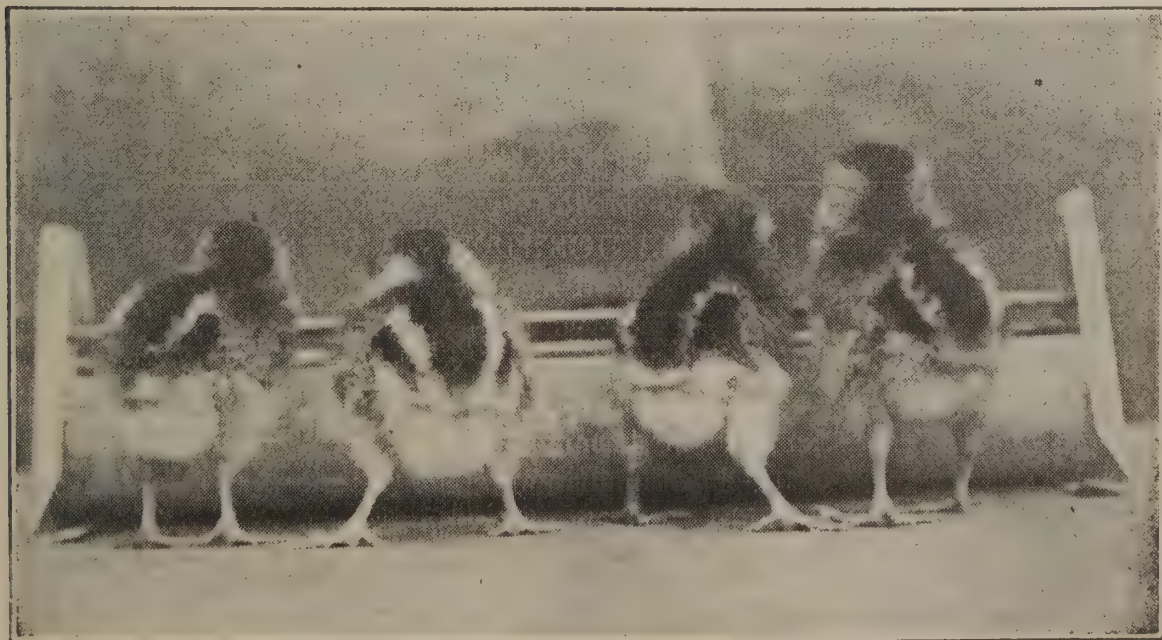
Feed Conkeys All Mash Chick Ration with Y-O the first four weeks, then gradually switch to Conkeys Gecco Growing Mash with Y-O. At this time, if the chicks are running on yards or range, it is profitable to introduce growing grains, as a combination of mash and grains for growing and laying birds is always more economical and the birds will develop better.

INGREDIENTS

Buttermilk, Corn Feed Meal, Whole Ground Oats, Whole Ground Wheat, Wheat Middlings, Meat Scrap, 1½ % Raw Bone Meal, Alfalfa Leaf Meal, Old Process Oil Meal, 1% Calcium Carbonate (source, Limestone minimum Calcium Carbonate 97%) ½ % Salt, Y-O (Cod Liver Oil, Yeast, Soybean Oil Meal, Wheat Middlings, ¼ % Red Oxide of Iron).

ANALYSIS

Protein, 15%; Fat, 4%; Fibre, 7%; N. F. E., 60%; Carbo., 67%.



STORAGE BROODING

THIS new method of starting chicks has sprung into great prominence among hatcherymen. It is also being used more-or-less in large commercial poultry plants. With this method large numbers of chicks can be kept in relatively small floor space for several weeks. This reduces the money invested in equipment. Where chicks are sold at the ages of three to four weeks this plan is both practical and economical. However, as the chicks grow it is necessary to reduce the number in each compartment to avoid the evils of over-crowding.

Just how long it is profitable to keep chicks in storage brooders is a much discussed question. Some poultrymen put their pullets in colony houses at the end of 30 days and carry the cockerels to the broiler stage in the storage brooders. Other poultrymen prefer to move all the chicks to brooder houses when they are from three to five weeks of age.

Where the plan is to produce broilers for early market, the storage brooder is becoming more and more popular for the chicks can be grown faster and thus sold earlier. The feed cost per chick will probably be less than 25c each—see Tables No. 1 and 2. Conkeys All Mash Chick Ration with Y-O was built especially for the storage brooder method of growing chicks. Simply keep it before the birds all the time and they will make maximum growth at minimum cost. You do not need to worry about lack of sunlight when feeding Conkeys All Mash Chick Ration with Y-O for the Y-O supplies the vitamins (sunlight) needed. Feed it the first four weeks.

Oglesby, Ill.,

The G. E. Conkey Co.,
Cleveland, Ohio.

Gentlemen:

I don't want to change from Conkeys to any other brand of feed. I am well satisfied with Conkeys. I am raising 100 chicks this spring and all I lost was 3 so far, some are 4 weeks old and the others are 2 and 3 weeks old.

There are some brands on the market but I don't like to change the feed because it will be a set back for my chicks.

I have raised chicks for 10 years and I know what it means to change from one brand to some brand that the dealer says is just as good. Cheap feed is the most expensive.

Yours truly,

Walter Erickson

Conkeys Y-O

PREVENTS RICKETS (LEG WEAKNESS)

ONE of the greatest values of Conkeys Y-O is the help it gives in raising baby chicks. It is a protective food, containing the anti-ricket vitamins which are absolutely necessary to prevent leg weakness and slow bone growth.

USE CONKEYS Y-O WITH OTHER FEED

If you do not have a supply of Conkeys Starting Feed with Buttermilk and Y-O, mix 2% of Y-O with the feed you are using. Y-O can be purchased in 1 lb.; 2 lb. and 5 lb. packages or in 25 lb.; 50 lb.; and 100 lb. drums. Use it in your starting feed to insure vitamins A, B and D. (See prices in back of book).

CONKEYS Y-O—COD LIVER OIL—SUNLIGHT

In the past, the thought was advanced that when birds and animals got plenty of sunshine they did not need cod liver oil. This was an erroneous idea, arising from the discovery that the ultra-violet rays of the sun have a very beneficial effect upon bone structure in young animals and birds—helps to prevent leg weakness (rickets). It is true that all forms of domestic animal and bird life react favorably to sunlight, but sunlight alone will not supply sufficient D vitamins—not to mention vitamins A and B—to care for bodily needs.

Further, sun-rays are weaker in the fall, winter and spring. And finally, the sun does not shine steadily enough to be dependable as a source of vitamin D supply.

In Conkeys Y-O the potency of vitamins A, B and D makes possible and profitable the rearing of chicks in total absence of sunlight. This is due to two things: First, the use of only the highest tested cod liver oil and brewers' yeast; and, second, the method of infusing the oil with the yeast and other ingredients so that the vitamin potency lasts for a long time.

NOTE—Brewers' yeast (Marmite) is known as "a dead yeast." It will not ferment like bakers' yeast and the vitamin B strength of brewers' yeast is far greater than raw bakers' yeast. (See inside front and back cover.)

*The G. E. Conkey Co.
6529 Broadway,
Cleveland, Ohio*

Gentlemen:

I am using Y-O in all of my feeds and wish to say that it is very satisfactory. When fed to my breeders it returns some two or three hundred percent profit over its cost as it increases the hatches considerably and the vitality of the chicks is wonderful.

*Yours very truly,
Joseph L. Darlington*

THE ACTION OF VITAMINS WHEN FED TO ANIMALS OR BIRDS

EACH class of vitamins plays a separate and collective part in the life, health and producing power of all animals and birds. Without these vital forces, eggs cease to be fertile and their hatchability becomes nil. Hens cease to lay, lose their vigor, their health and die; chicks cease to grow, sicken and die; young animals become sickly, stunted and death results; and adult animals fail to breed and have young.

VITAMIN A

Vitamin A helps to guard against contracting nutritional roup, diseases of the eyes, etc. It helps the functioning of the reproductive organs. With birds it increases egg production and increases the fertility and hatchability of the eggs. With pigs, rabbits, foxes, dogs, cats—all animals—it increases the number or vitality of the off-spring.

VITAMIN B

Vitamin B is a great aid to digestion. It assists in the assimilation and absorption of the food as it passes through the intestines. It promotes more rapid growth of muscle and bone and also adds greatly to the luster and smoothness of the plumage or fur. In fowls, production is increased and the fertility and hatchability run especially high. In animals, the adults have better health while carrying their young and the young are likely to be more numerous. All will have greater resistance to disease. Vitamin B is an anti-neurotic vitamin and assists the body greatly in the prevention or cure of nervous disorders.

VITAMIN D

Vitamin D is very important and if abundant in the ration will prevent or cure rickets (leg weakness). In the process of digestion it aids the organs to assimilate the proper amounts of calcium and phosphorus. It is probable that this vitamin plays a large part in assisting the digestive organs to liberate and assimilate quantities of calcium sufficiently large to always insure birds laying eggs that have exceptionally strong shells and animals delivering young exceptionally strong in bone development.

When all three vitamins—A, B and D—are added to the ration, they assist the digestive organs in dissolving and assimilating the mineral elements in the feed, resulting in a more complete process of digestion. With mature birds this results in more eggs, larger eggs, stronger-shelled eggs, increased fertility and greater hatchability. With chicks and growing animals the presence of these vitamins not only prevents rickets (leg weakness) but assures most rapid growth of muscle, bone and all-around development.

And so in building feed formulas one must now add, in addition to the proteins, the carbohydrates, the fats and the minerals—*vitamins*. The difficulty is to retain the potency of vitamins A and D in cod liver oil—which is one of the greatest carriers of vitamins known—when the oil is exposed to air. Conkeys Y-O is the only vitamin food which preserves the potency of vitamins A and D. Use it in all your feeds.

Conkeys PORTABLE BROODER

HOUSE PLAN

(See Plans on Next Page)

THE Conkey Portable Brooder House Plan is the result of study of hundreds of brooder houses on farms and poultry plants. It has several new exclusively Conkey features that make it a most popular style.

FIRST—The Feed Bin. Bags of feed are dumped into the bin from the outside. The old way of carrying sacks of feed inside the house and setting them down on the floor often resulted in accidentally killing chicks. Also, sacks of feed in the brooder became dirty and torn and chicks sometimes would swallow and choke on sack strings. Another terrible waste resulted from chicks pecking holes in the sacks and a consequent loss of feed. Note particularly the rainproof construction of the bin. The bin opens on inside also, allowing for scooping out of feed into the hoppers.

SECOND—Examine closely the front windows. Wire frames keep the chicks from roosting on window edges while the window arrangement prevents cold draughts striking the chicks.

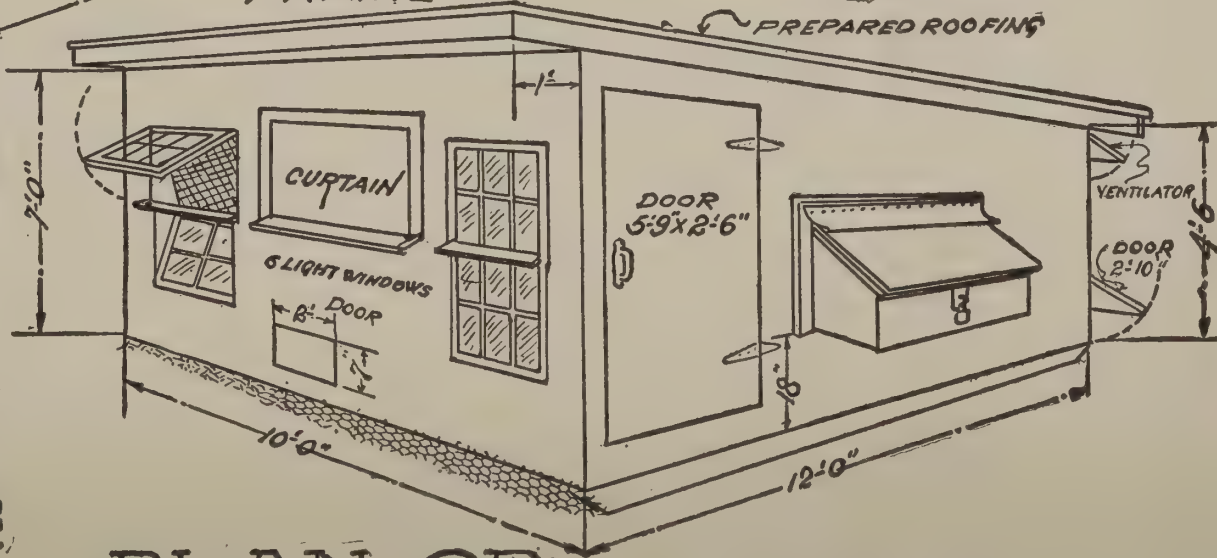
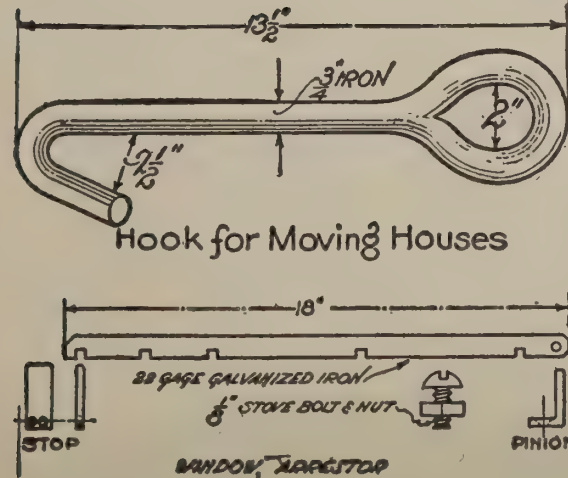
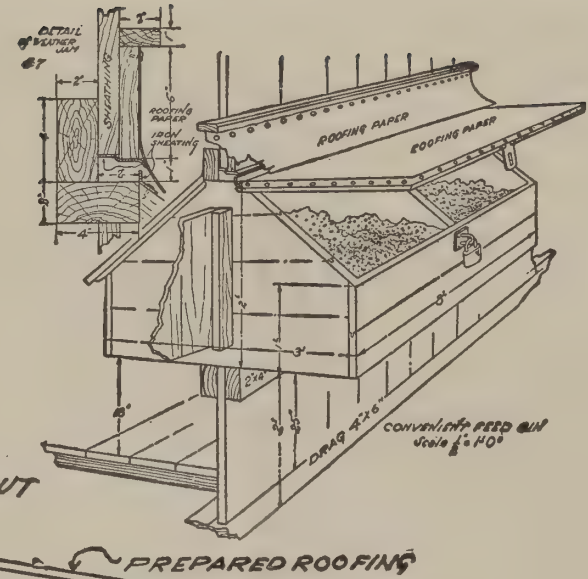
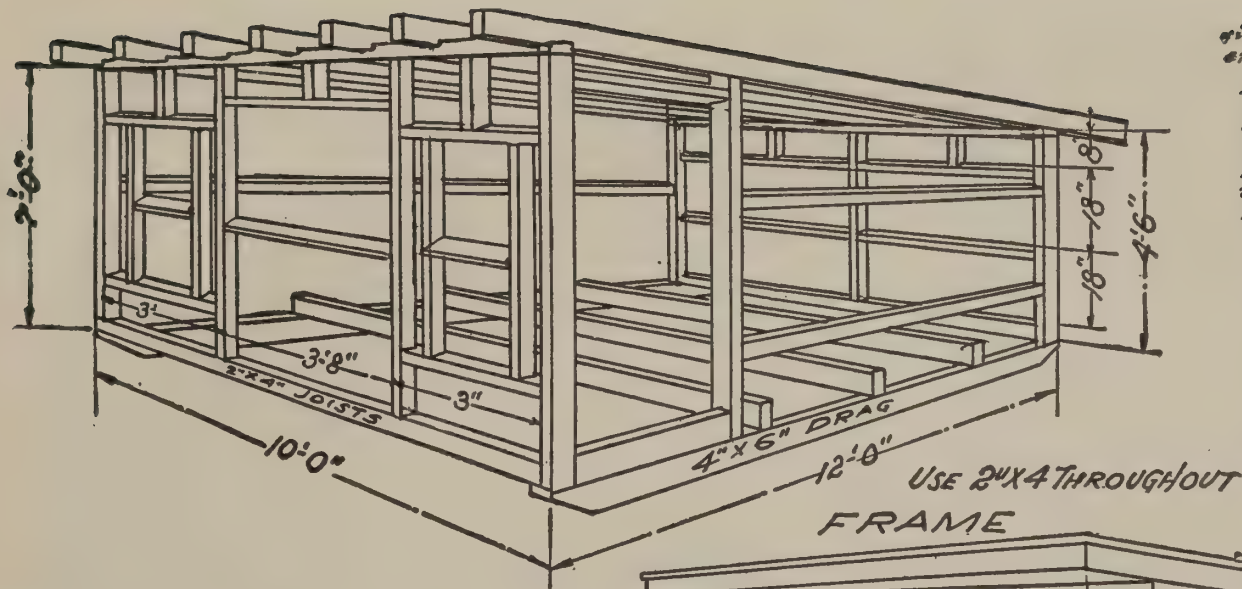
THIRD—Back ventilators take off top and bottom heat in summer. This house is cooler in summer than many shade contrivances. Cleaning is made easy—see bottom back ventilator, shown on page 31.

MATERIAL FOR BROODER HOUSE

2 Pieces 4"x6"x12'	(Drag)
10 Pieces 2"x4"x14'	(Rafters, front and far side wall)
14 Pieces 2"x4"x10'	(Joist, side, back, top plate and right side)
2 Pieces 1"x8"x12'	(Shuffle boards)
10 Pieces 1"x2"x12'	(Curtain, window, ventilator, frame-screens)
1 Piece 1"x6"x10'	(Window sills)
1 Piece 1"x12"x4'	(Lower shields)
1 Piece 1"x8"x4'	(Upper shields)
700 Feet B. M. Ship lap	(Floor, siding and sheathing)
2 Pieces 1"x4"x14'	(Finishing board on roof—sides)
2 Pieces 1"x4"x10'	(Finishing board on roof—front; back)
10 Pieces 1"x6"x12'	Flooring (Feed bin)

ROOFING, HARDWARE, SASH, ETC.

2 Rolls roofing: 4 2'x2' window sash
26 Linear feet 1" mesh poultry netting, 30" wide
3 Pair 6" strap hinges (door; lower ventilator); 9 Pair 3" butt hinges
1¼ Yard Muslin for screen
10 Lbs. 6d nails; 5 Lbs. 8d nails; 5 Lbs. 10d nails; 2 Lbs. 20d nails;
1 Lb. Poultry netting staples
3 Small window bolts (lower windows and small door)
2 Large window bolts (back lower ventilator, if needed)



PLAN OF PORTABLE BROODER HOUSE

Figure No. 11—If interested in Constructing your Brooder House after this Plan send 30c for Blue Print.

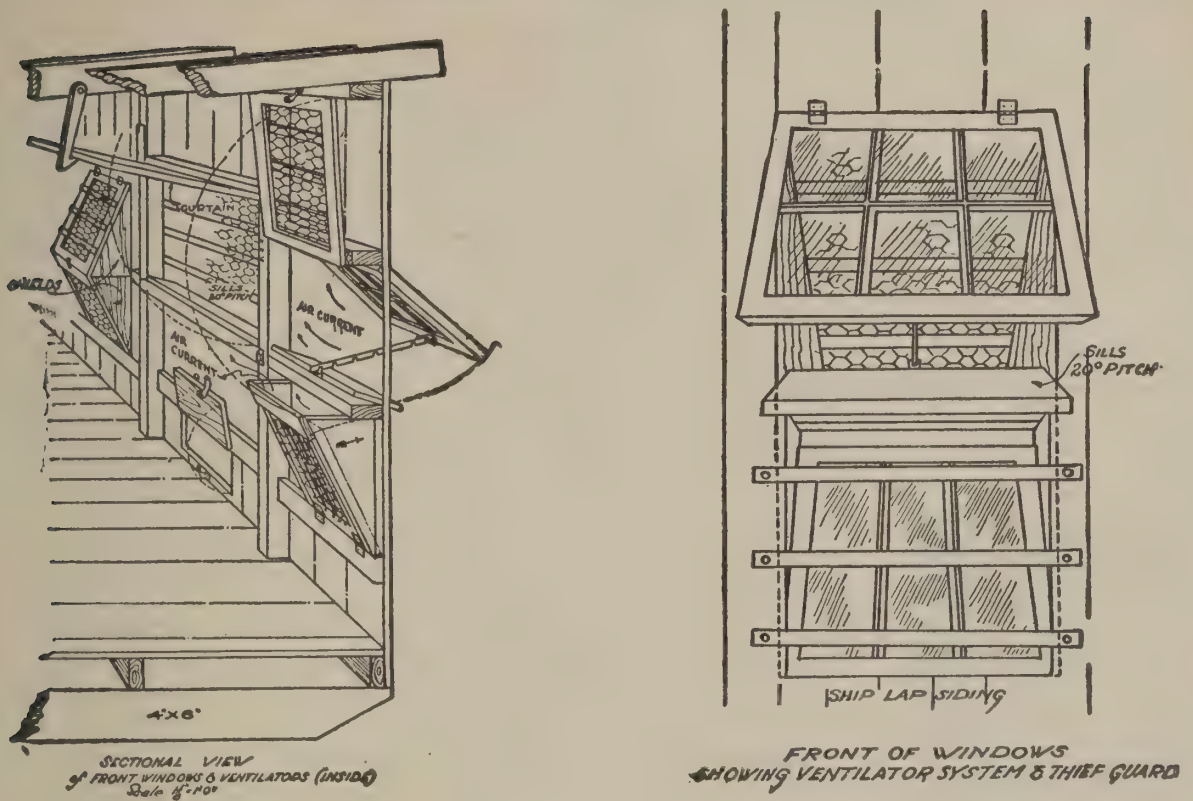


Figure No. 12
Details of Brooder House

FATTEN YOUR BIRDS

IT IS always practical to feed some Conkeys Geccofat Mash before you market your broilers or adult birds. Broilers can be made to gain from one-fourth to three-fourths of a pound in a week to ten days and adult birds frequently gain a pound or better in that time.

Broilers will consume less than an additional pound of fattening feed and hens will usually eat about $1\frac{7}{9}$ pounds of feed to make a one pound gain. By feeding Conkeys Geccofat you can just about double the ordinary increase in gain for the last ten day period and add considerably to your final profits at the time you market the birds. Write for circular on Conkeys Geccofat.



IT LEADS THEM ALL IN:—

- 1st—Its power to absorb either water or buttermilk.
- 2nd—Its palatability (most appetizing).
- 3rd—Its adaptability (birds rarely "go off feed").
- 4th—Its prevention of "picking."
- 5th—Its power to produce the fastest gains.
- 6th—Its power to produce the greatest total gain.
- 7th—And its net return to you—the user.

These statements may sound like "a large order," but they are true; for in building Geccofat with Y-O, the above factors were kept constantly before us and test after test was made with many different formulas and other commercial feeds. In other words, Conkeys Geccofat with Y-O is the direct result of continuous testing and working with food elements until a feed was developed that surpassed all others in the above named qualities.

RATE OF CHICKEN GROWTH

Compare the weight of our chicks with the standard used by Cornell University.

Leghorns, etc. Age in Weeks	Weight	Feed Required
8	1 lb.	3.5 lbs.
14	2 lbs.	9.8 lbs.
17	2½ lbs.	13.6 lbs.
21	3 lbs.	19.4 lbs.
American Breeds		
7	1 lb.	3.0 lbs.
11	2 lbs.	7.2 lbs.
16	3 lbs.	13.6 lbs.
22	4 lbs.	23.7 lbs.

Note:—Turn to the front of the book for approximate feed costs.

GROWING STOCK

JUST because the chick season is over does not mean that the growing birds no longer need care. The quality of next winter's pullets and yearling hens depends very largely on the care given from now on. As the chicks develop, they must have enlarged quarters. Right here is where many losses begin. Five hundred chicks under a five hundred capacity brooder means over-crowding inside of two weeks and the crowding and risk increases as the chicks grow.

Separate your pullets and cockerels as early as possible. Experience soon enables you to recognize the difference very early for cockerels stand more erect and have a triangular shaped body. Pullets have long bodies and develop tail and wing feathers more quickly. Different breeds have different color markings and it pays to know the markings of your own breed.

All birds intended for broiler and fryer purposes should have only limited yards because they should not exercise excessively. Put some low roosts in the brooder house or range shelter early—fifth to sixth week—and the chicks will gradually learn where the perches are and in thirty days to six weeks they all will have learned how to roost.

Growing pullets must have every opportunity to build up strong bodies in order to become good layers. A large percentage of fall colds, roup and paralysis among pullets is due to wrong management during the summer months. These future layers cannot stand the intensive methods used for broilers. They must have plenty of green feed and be kept on a growing ration until they are near the laying period. Pullets that are neglected and become stunted during the middle or latter part of their growth rarely, if ever, lay as many eggs as the well cared for birds.

Do not be misled into the common belief that when birds do not start laying until midwinter that they will lay late the following fall. On the contrary these birds will, in all probability, be the first to molt in the summer. Pullets that begin laying early in the winter, as a rule, lay steadily. Resolve to keep your young stock up and coming all the time.

Keep Conkeys Gecco Growing Mash with Y-O and Growing Grains—the second link in the Conkey chain—before the birds all the time, even when their range is excellent. If this feed is not available be sure to use care in purchasing a first-class balanced ration for your growing stock and add 2% of Conkeys Y-O to this mash.

Should the growing stock at any time lack vitamins A, B and D, the result will be slow-developing, undersized pullets, dragging into the winter with only a few small eggs. But feed the growing stock Y-O and their rapid development, their blood-red combs, yellow legs, lustrous plumage and alert bearing will amaze and delight you. You will experience the "big thrill" that always comes when the whole flock of pullets snap into a lay almost simultaneously and real profits come rolling in.

CARE AND FEEDING OF MATURE STOCK

It has been estimated that a hen consumes, in proportion to her weight, twice as much dry matter as does a dairy cow. She is a most efficient transformer of raw material into a finished product and, properly managed, pays handsome returns.

In order to feed intelligently, it is necessary to be familiar with the nature of the hen, the feed, and the finished product which in this case is the egg. In caring for her we must always bear in mind that her digestive system is short and comparatively simple. She has only slight provision for the digestion of fibre and does not have a very large capacity. Consequently, coarse and bulky feeds are not proper for hens.

On the other hand, the large use of concentrated feed always increases the danger of indigestion and that is why it is so necessary to have a proper balance in poultry feed rations. As a rule it requires from 75 to 80% of the feed consumed to meet maintenance needs, the remainder of the feed going toward profitable production.

HOUSING THE PULLETS

This is the time to prepare the laying house for the pullets. Give it a real "house cleaning." Do not stop at scraping the droppings board and shoveling up the litter from the floor, but take the cobwebs off the ceiling, clean and scrape the floor and walls close to the floor; clean the canvas curtains or replace with new material; replace window-panes or mend the torn glass-cloth. Rake and pick up litter off the yard or range.

Finally, disinfect the whole inside of the building, including walls, ceiling, roosts, droppings board, floors, nest boxes, feed hoppers and water containers—everything with which the birds are likely to come in contact—with Conkeys Nox-i-cide to kill odors and germs and make things sanitary and free from parasites.

At least 30 days before pullets are expected to begin laying, they should be moved to winter quarters in order to get them accustomed to their new surroundings and allow time to make the necessary changes in their ration. Give them a good treatment of Conkeys Worm Remedy while they are still on the range or immediately after being housed in their new quarters.

CULLING THE PULLETS

You will probably find about one out of every ten birds that should be sold at once, as their upkeep will be likely to exceed their production. Handle each bird carefully. Look for physical defects or weaknesses and characteristics that indicate the bird is likely to be a poor layer. If many of the following are present in one individual it should be culled out.

1. An under-sized, small-boned pullet with little or no comb development.
2. A slight, undeveloped body, with long, coarse legs and little head and comb development, indicating a bird that will be very slow to mature.
3. A long, narrow, crow-shaped head.
4. A thick, coarse head, showing thick rolls of flesh over the eyes.

5. Eyes that are sunken—not large and prominent.
6. A narrow, pinched-back, near the tail head.
7. A knock-kneed bird.
8. Birds showing an extreme narrowness of feather. This indicates lack of vitality and such a bird is likely to become sick and perhaps scatter disease throughout the rest of the flock.

FEEDING THE PULLETS

Do not put the pullets on egg mash until they are fully developed and well fleshed. Forcing your pullets to lay prematurely will simply react injuriously on you for the birds will soon slacken in their lay and may even go into a partial molt. A partial molt in the fall or early winter invariably means few, if any, eggs until the birds recover.

Give an abundance of grain at this time if their body weight is not up to the standard for age and for the weight the pullets should be according to variety and strain—see weights on page 16.

Introduce the laying mash gradually, as any sudden change in feed is likely to cause the birds to go into a neck molt. Feed scratch grains generously—about 55 to 60% scratch grains to mash—until the change in mash is completed. Then slowly reduce the amount of grain given until the ration runs about equal parts of grain to mash. A good laying mash should have 20% animal food in its composition if best results are expected.

CARE OF YEARLING HENS

In the late fall and early winter hens require very different care from pullets. The pullets are just beginning their lay, while the hens are closing their year's performance. Since you have kept only the best hens, they are also the ones that are last to molt. They will be late in getting their new feathers and sadly in need of a few weeks' rest. Therefore, do not expect them to begin laying again until around the first of the new year.

For this reason the hens should not run with the pullets and eat their ration, which is gradually changing for heavier egg production. These hens need more grain and less mash. This will allow them to rapidly regain their strength, and when they are once more fully feathered—see chapter on culling—gradually reduce the grain until it is once more 50% or less of their daily feed. This will stimulate them into a lay provided the mash you are using contains 20% animal food, like Conkeys, and the hens will give a good account of themselves for another year.

HOW TO FEED MASH

Keep Conkeys Gecco Egg Mash—third link in Conkeys chain—dry, just as it comes from the bag, in open hoppers before hens all the time.

To increase mash consumption in late summer and early fall, July, August and September, some poultrymen find it beneficial to give a feeding of wet mash every morning, or at noon and at the same time keep the dry mash hoppers open. If mash is fed wet, have it moist and crumbly, never wet and sloppy. Feed only as much as the birds will clean up in fifteen minutes, and after feeding clean troughs.



Gentlemen:

Lincoln, Illinois

We are writing you to tell you of the wonderful results that we have been having with your Egg Mash with Y-O on our poultry farm.

After trying a number of different feeds, we bought Conkey's Egg Mash with Y-O and after feeding it for some time we began to notice that the health of the laying hens appeared to be better than ever before and during the coldest and gloomiest days of winter there was not a sign of sickness among our flock.

Our laying hens gave us good egg production during the winter months although we experienced 20 below zero several times during the winter and another thing that we noticed which pleased us very much was that they consumed less Conkey's feed than they did others, yet still giving better results.

Y-O in the mash seems to supply just what was missing in the other feeds used and we will certainly never feed anything else on our poultry farm.

Thanking you and assuring you that we will always be a Conkeys booster, we remain,

SIEB'S HATCHERY

HOW TO FEED GRAIN

(Mark Some Hens)

Grain feeding might be called the "control ration," for either increasing or decreasing it will directly affect body weight and egg production. You should endeavor to feed sufficient grain to maintain body weight but not enough to retard egg production. To check up on this, spot a few birds with paint and weigh them frequently. In this way you will know if your flock is losing, gaining or maintaining weight; and it is then a simple matter to increase, decrease or continue to feed the same amount of grain. In the fall and winter feed 100 lbs. to 80 lbs. of grain to each 100 lbs. of mash consumed. In late winter and early spring feed 80 lbs. to 60 lbs. of grain to the 100 lbs. of mash eaten and in summer feed 50 lbs. to 30 lbs. of grain to 100 lbs. of mash.

WATER

Always keep plenty of fresh water handy. Don't let water get stale in summer or freeze in winter. Thoroughly wash and disinfect fountains and premises at least once a week with Conkeys Nox-i-cide. In wet, stormy, "roupy" weather, keep Conkeys Old Reliable Powder (formerly called Conkeys Roup Remedy) in the drinking water as a preventative of cold, catarrh, roup, pneumonia and the like. In summer, if diarrhea is noticeable, use Conkeys Diatex (formerly called Conkeys White Diarrhea Remedy).

GRIT, OYSTER SHELL AND CHARCOAL

Keep a supply before birds all the time.

GREEN STUFF

If hens are yarded, give them a daily feeding, at noon, of sprouted oats, cabbage or similar green food. Do not let cabbage freeze in winter. In this condition it is dangerous. Leaves from legume hay such as alfalfa, soybean, etc., make good substitutes for fresh greens. Place in racks within easy reach of the birds.

Fowls that do not get sufficient green food have all the more need for cod liver oil or Conkeys Y-O which combines yeast with cod liver oil and insures an ample supply of A, B and D vitamins.

MINERALS

The common opinion that excess mineral elements make for safety in chick and poultry nutrition and at most can do no harm, is ill-founded and erroneous. Excessive minerals added to poultry feed retard growth and deplete vigor and vitality.

The important factor in a poultry ration is to have the proper balance of the right kind of feed so that the birds will get the necessary mineral elements out of their feed and grit. This is the natural and only dependable way.

There is only one modification of this statement and that is when vitamins A, B and D are added to the feed, the vitamins help the digestive organs in some manner, no one knows just how, to more completely dissolve and assimilate the mineral elements that are already a part of the various ingredients and which would otherwise be passed off unused. This

is how and why Conkeys Y-O helps the chicks, the growing stock and the laying hens. Y-O is not a mineral food. It is a vitamin food. There is a big difference.

IT'S FUN TO KEEP CONKEYS NEW EGG-RECORD CHART

Most egg records are tiresome to keep and hard to figure out but this new Conkey Egg-Record Chart is a lot of fun and as simple as A B C. You can tell the moment your eye rests on this chart just how your hens are producing; you don't have to read a single figure—just follow the line.

Keep a chart like this to know what your flock is doing and to show your friends just how fine your hens are laying. Conkey will furnish these charts FREE. Here's how it works:

Across the top—see filled-in-sample chart on opposite page—are the days of the month. Along the left-hand side are percentage figures. Now then, suppose you have 100 hens which laid 32 eggs the first day of the month, all you have to do is to draw a line starting a little above the 30% line in the 30% square in the first column—under date of the 1st.

Suppose the birds lay 38 eggs on the second day; just continue to pencil line up to the 38th line (in the 35% square). Each day you add to the pencil line in the column for that particular date—either up or down. Now, that is all there is to it; but as the days go by and the line lengthens, you can tell instantly if the flock is going up or down. Should the line go down day after day you had better check up to see what is wrong. If the line goes too high watch your hens closely for they may be laying too heavily—losing too much body weight. This may result in a partial molt.

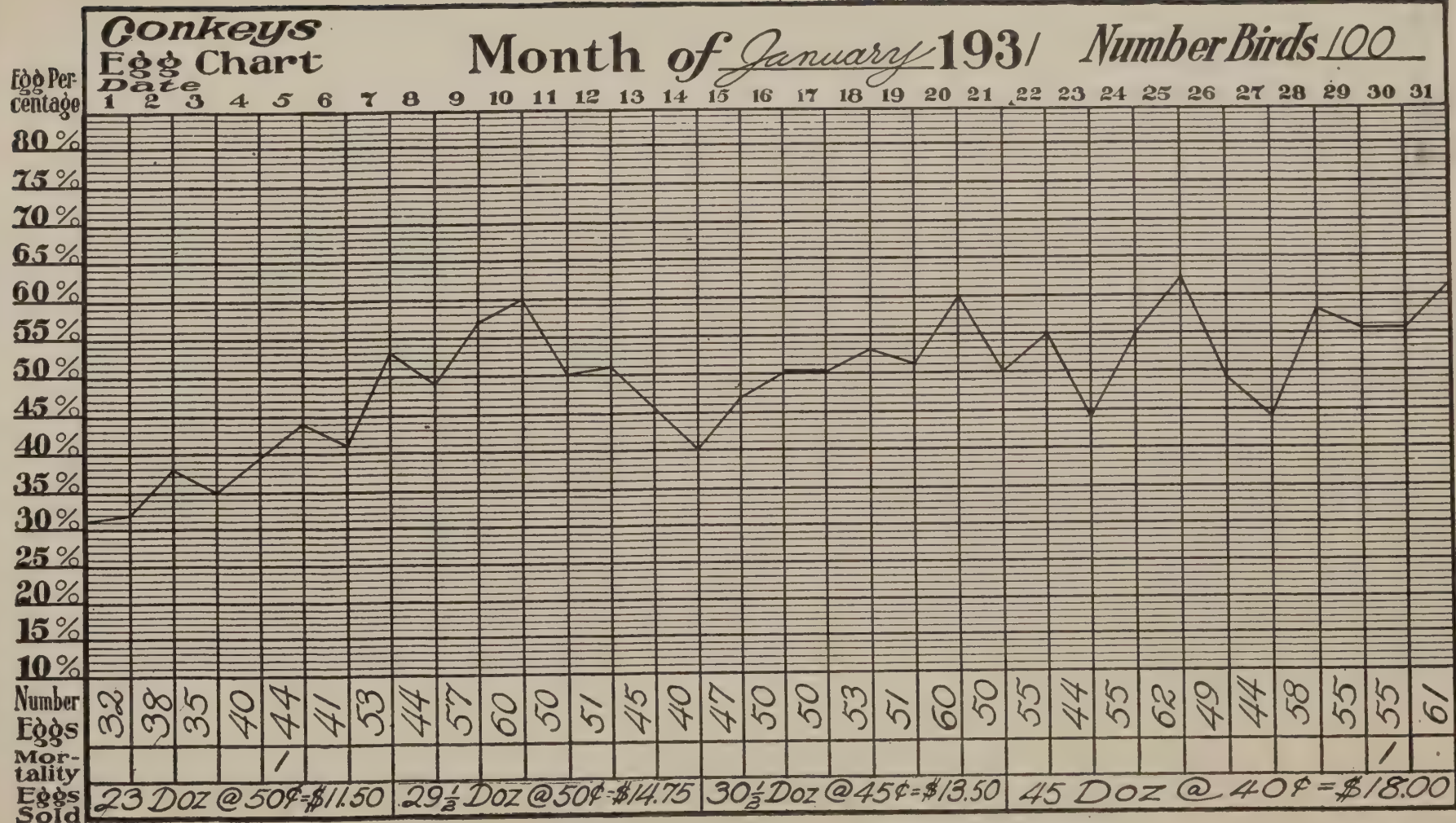
Keep a record at the bottom of the chart showing the actual number of eggs laid, just like you would ordinarily. If you put the figures in sideways you can easily add them up at the end of the month.

The chart on the opposite page shows a record for 100 hens. Below are given tables of percentages already worked out for flocks ranging in numbers from 110 to 130. Percentage tables up to 300 birds are found on the back of every chart. You can work out a set of tables in just a few moments if you have over 300 hens to a section or house. The actual charts are larger than the one illustrated here. There is plenty of room to record the figures. Each chart is good for a full month.

This is a wonderful way to keep the record. You always know what the birds are doing without having to stop and study a lot of figures. Send and get a supply of these charts—they are FREE.

PRODUCTION PERCENTAGE TABLES

110 Hens		120 Hens		130 Hens	
22 eggs	20 %	24 eggs	20 %	26 eggs	20 %
27 eggs	25 %	30 eggs	25 %	32 eggs	25 %
33 eggs	30 %	36 eggs	30 %	39 eggs	30 %
38 eggs	35 %	42 eggs	35 %	45 eggs	35 %
44 eggs	40 %	48 eggs	40 %	52 eggs	40 %
49 eggs	45 %	54 eggs	45 %	58 eggs	45 %
55 eggs	50 %	60 eggs	50 %	65 eggs	50 %
60 eggs	55 %	66 eggs	55 %	71 eggs	55 %
66 eggs	60 %	72 eggs	60 %	78 eggs	60 %
71 eggs	65 %	78 eggs	65 %	84 eggs	65 %
77 eggs	70 %	84 eggs	70 %	91 eggs	70 %



Number hens at end of month 98

Average number of eggs per bird 15

Copyright 1930 by The G.E. Conkey Co., Cleveland O.

Egg Income	57.75
Value Birds Sold	.00
Total Income	57.75
Feed Cost	20.00
Profit	37.75

1537 Total number of eggs

KEEP A RECORD

KEEP A FLOCK PRODUCTION RECORD—Study your pullets and hens. This chart will help you see how your averages compare from month to month.

It shows the monthly percentage from 4 flocks which average respectively 75 eggs, 134, 160 or 213 eggs per bird annually.

The first two blank columns are to record the monthly average per bird from your pullets and your hens. The last two columns provide for carrying the average percentage from the beginning of the record, to date.

You should get these averages from your daily egg record sheet on the last day of each month. Keeping records on the flock tells you at a glance what your flock is doing and will enable you to know instantly if anything goes wrong with the birds. Write The G. E. Conkey Company, Cleveland, Ohio for daily egg-record cards—see pages 38-39.

Month	75 eggs per bird	134 eggs per bird	160 eggs per bird	213 eggs per bird	Your pullets	Your hens	Average of pullets to date	Average hens to date
November	1.0	3.5	5.0	16.7				
December	1.4	4.8	8.0	19.9				
January	6.8	6.5	10.0	17.8				
February	12.4	10.2	13.0	16.0				
March	10.4	16.3	17.0	21.2				
April	10.0	18.3	21.0	23.3				
May	9.7	17.2	20.2	22.3				
June	7.9	14.4	18.0	19.5				
July	6.3	13.9	16.0	19.0				
August	6.4	12.8	14.0	16.4				
September	2.3	10.1	11.0	14.7				
October	0.0	6.0	7.0	6.6				
Total	75.0	134.0	160.0	213.4				

FREE BULLETINS, CIRCULARS, ETC.

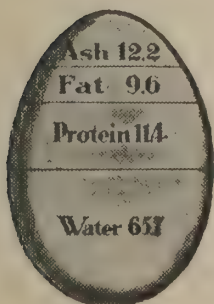
(Bulletins and Circulars are Free)

BULLETINS

- Mating Domestic Fowls To Secure High Egg Production, No. 110
How To Preserve Eggs, No. 100-A
Capons And Caponizing, No. 107-A
Pigeons, No. 106-A
Geese, No. 105-A
Feeding, Care And Management Of Ducklings, No. 102-B
Pheasants, No. 104-A
Preparing Poultry For Exhibition, No. 101
Turkey Raising, No. 103-C
Artificial Lights For Poultry, No. 112

**CIRCULAR AND RECORD
BLANKS**

- Feeding Baby Chicks
Feeding Growing Stock
Feeding Laying Hens
Fattening Broilers and Adult Birds
Feeding a Supplement Poultry Feed
Feeding Rabbits
Feeding Pigs and Hogs
Feeding Calves
Feeding Dairy Cows
Daily Milk Record Blanks
Daily Egg Record Blanks (by the year)
Daily Egg Record Charts by the month (like on page 39)
Daily Trap Nest Record Blanks



WHAT AN EGG CONTAINS—Note the large amount of water shown in the analysis in the picture. Water is your cheapest egg-making material—give hens plenty of it. Eggs have definite chemical ingredients and proportions. To make an egg, therefore, a hen must have proper ingredients balanced in the necessary proportions. If any single ingredient which the hen needs is missing, she simply does not lay. Many hens not laying are simply waiting for a good balanced mash like Conkeys or the

addition to their ration of vitamins A, B and D. Feed Conkeys Y-O (yeast with cod liver oil).

POULTRY CULLING

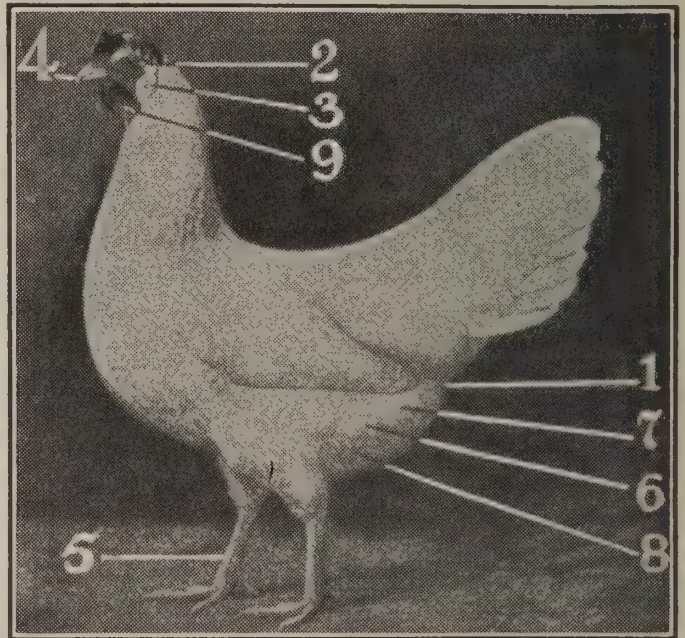
Culling poultry should really be practiced every month in the year but if you do not cull monthly, at least cull during each of the three months, July, August and September and sell all birds that have ceased to lay or show signs of low production. In the average flock only one bird out of two or three is worth keeping through another year.

COLOR CHANGES

When a hen is not laying she deposits fat on her body. This fat contains a yellow pigment (in yellow skinned varieties) which gives a yellow color to the legs, beak, skin, etc. As soon as the hen begins to produce eggs, this yellow pigment is used in coloring the egg yolk. As long as the hen produces eggs the pigment is all used by the yolk and none of it finds its way to the body. When she stops laying this pigment is again deposited with the body fat.

Pigment deposited in the body during the hen's rest period naturally fades or bleaches out during production, leaving the body color a bluish-white or pink. This process of fading follows a definite course, always in the following order: First, the vent; second, the eye-rings and ear lobes; third, the beak; and lastly, the shanks.

The kind of feed given affects the period of time necessary for the color to fade, as the yellow pigment is derived from the grain and the green food. Hens fed yellow corn and plenty of green food have a larger supply of yellow pigment stored in their bodies than hens fed on white corn, with no green food. The more yellow pigment stored, the longer the time required for bleaching.



CULLING NOMENCLATURE

1. Vent; 2. Eye-Ring; 3. Ear Lobe; 4. Beak;
5. Shank; 6. Abdomen; 7. Pubic or "Pin"
Bones; 8. Rear of Keel or Breast Bones;
9. Wattles

VENT

First to lose the yellow color after production starts is the vent. A white or pink vent on a yellow-skinned bird indicates she is laying. The

NOTE—Material for this article was furnished by E. L. Dakan, Professor of Poultry Husbandry of Ohio State University.

eye-rings, which are in the inner edge of the eyelid, bleach out next. A bleached eye-ring indicates a longer production than a bleached vent.

A large, open, moist and soft vent indicates a laying hen, while the vent of a non-laying hen is small, closed, dry and puckered.

BEAK COLOR

The beak loses its color before the shanks. A white beak indicates the hen has been producing eggs from 6 weeks to 2 months. Color leaves at the base first and gradually disappears until it finally leaves even the front part of the upper beak. The lower beak bleaches faster than the upper. Observe the lower beak carefully when the upper is black or brown.

SHANK COLOR

Shanks are the last to lose the yellow color and for this reason are the surest indication of long, continued production. It takes from 4 to 5 months for the shanks to become white after the hen begins producing eggs. Color leaves the front of the shanks first and gradually fades from the back as the length of the laying period increases.

COMB

Laying hens have large, full and bright combs and wattles, while the comb and wattles of a non-laying hen are dry and hard, often covered with scales and are pale in color.

ABDOMEN

The abdomen of a laying hen is covered with soft and pliable fat, while the skin is smooth and velvety. The abdomen of a non-laying hen is dry and hard. In heavy hens—not laying—the abdomen may consist largely of a chunk of fat.

PELVIC BONES

The pelvic or "pin" bones of a laying hen are straight and flexible with very little or no fat around them. They are spread far enough apart to permit the passage of the egg. No definite measurement can be given as the spread varies with the individual and the breed. A hen that is laying will show a greater spread than the one not laying and the bones of a non-laying hen are thick, stiff and blunt with the ends bent in.

DISTANCE FROM PELVIC BONES TO KEEL BONES

High producing hens consume more food than low producing. In order to digest the food the intestines of a laying hen are larger than one not laying. When laying, the ovary and oviduct are greatly enlarged and require more room, consequently the body increases in depth. Increase in size of the body cavity comes through the dropping of the keel bone. By measuring the distance from the pin bones to the keel bone, an idea can be formed as to whether the hen is in laying condition or not. As a general rule, a hen that measures less than three fingers is not laying or is a poor layer, because the hen lacks the capacity for handling a large amount of feed. The hen that shows the greater body depth is to be chosen as a good layer if she shows the other marks of egg production.



**"Two-Finger"
Pelvic Spread**



**"Three-Finger"
Pelvic Spread**



**"Two-Finger"
Depth**



**"Four-Finger"
Depth**



A Narrow Back



A Wide Back

BODY DEPTH

Hens having deep bodies when measured from the center of the back to the end of the breast bone are best. A good hen is flat sided and has a long, prominent breast. This method of determining a good layer is preferred to that of measuring the distance from the pin bones to the keel bone, because the latter merely tells if the bird is laying at the time.

BODY WIDTH

High producing hens have wide backs over the heart and carry this width well back to the tail. A wide back at the rump or just back of the hips is especially desirable. (See page 44.)

THE MOLT

Most hens stop laying when they begin to molt. Since the molting period covers many weeks it is advisable to sell the early molters. The consistent layer molts late and grows her new plumage rapidly. Hens that molt early under normal conditions will not lay as many winter eggs as hens that molt late; neither will they begin laying any earlier in the spring. As a rule, the first hens in a flock to molt should be sold and the last to molt should be kept for breeding purposes.

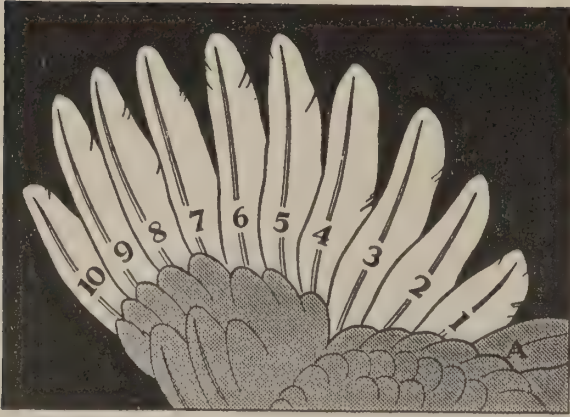
Do not overlook the fact that the birds may be thrown into an early molt by sudden starving while laying heavily, by irregular feeding; by roosting in a poorly ventilated house or by any way that tends suddenly to check egg production. Avoid sudden changes of any kind.

WING FEATHERS

In order that birds may be able to fly at all times, Nature provides that they molt the least important feathers first. That is why feathers are dropped first from the neck, then from the body and lastly from the wings. The ten large feathers of the wings called primary feathers are dropped one at a time at intervals of about two weeks. They are molted from the inside of the wing out. A small axial feather separates the primary and secondary feathers. (See figure A, page 46.)

From 1 to 10 is the order in which the primary feathers are molted. When No. 1 is dropped the hen will lose about two weeks' production and so on with each primary feather, which means a total of about twenty weeks before all these feathers are molted. This hen has a full new wing, indicating that she was an early molter and had been out of production several months. In figure B the hen was in laying condition December 20. Her wing clearly shows that she molted feathers No. 1 to 5, and that feathers 6 to 10 have not been molted. High producing hens rarely go through a complete wing molt at one time. It takes at least six weeks for a primary feather to mature. As all new feathers in this wing are mature, we know that this hen has not molted one for six weeks. (Page 46.)

Figure C shows the wing of a late molting, high producing hen, December 20. Feather "A" is the axial feather. Feathers 1 and 2 are mature new feathers, at least six weeks old, indicating that the hen took a rest at some time during the early fall. Feathers 3, 4 and 5 are new feathers just coming in. Feather 6 is not visible as it is just coming through. This hen is resting while these new feathers are growing. Feathers 7, 8, 9 and 10 are old feathers and probably will not be molted this season. Note how ragged they are. This hen was an unusually good producer.



A. All New Feathers



B. Half of Feathers—1, 2, 3, 4, 5—Molted



C. Late Molter. Only Two New Full Grown Feathers

Careful attention to the preceding pages will enable any poultry raiser to manage a flock successfully. With proper housing, sanitation and feeding, poultry will thrive and disease be kept to the minimum. Prevention is better than cure. But every poultryman should be prepared at all times for disease, and treat it properly at the very first indication. See the following pages, and remember in times of trouble Conkey is ready to help you.

CULL THE POOREST, KEEP THE BEST—Cull in July, August, and September the hens that show:

1. Well developed molting with distinctly contracted comb and wattles.
2. Dry, contracted abdomen, with a dry, wrinkled, puckered vent.
3. Yellow shanks and beak.

Test A will usually be sufficient, but it should be combined with B and C for greater accuracy. Test C is merely an indication of past performance, and should be combined with test A for accuracy.

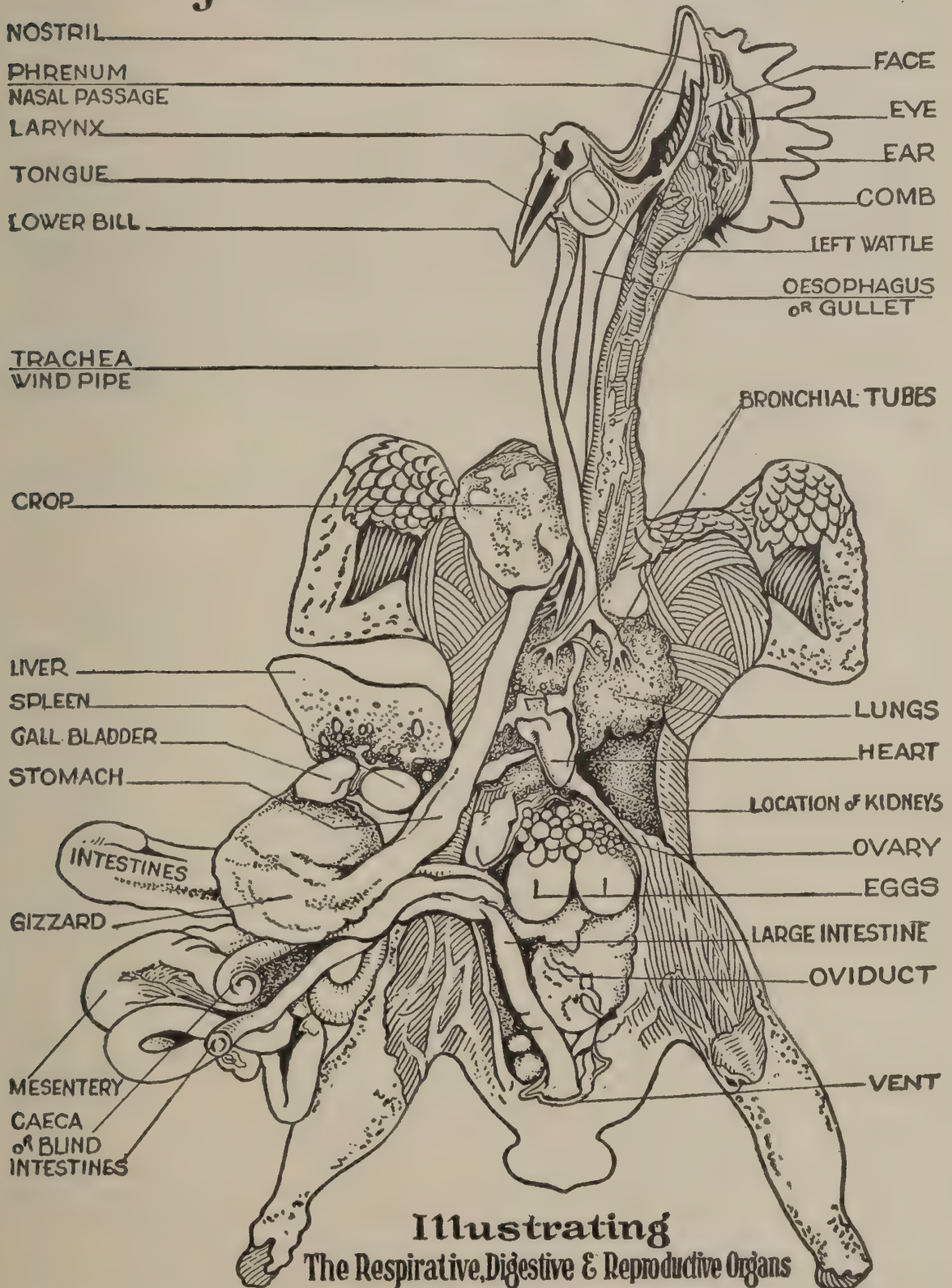
If the poultryman wishes to cull everything but the very best, the selection should be repeated in October and November.

KEEP HENS SHOWING:

1. Incomplete molt, red comb, bright eye.
2. Well spread pelvic bones, good depth from pelvic bones to keel bone, and a soft, pliable abdomen.
3. Pale, faded shanks and beak, white vent, eye-rings, and ear lobes.

To make the selection with greatest accuracy, use all these tests.

Conkey's Anatomical Chart of The Domestic Fowl





Have a Conkey Shelf in Your Poultry House

DISEASES OF POULTRY

TO A great extent, poultry profit depends upon good stock, properly housed, developed and fed and strict sanitation. Be prepared by having a well supplied Conkey corner. Prompt attention at the first symptom of disease may save many valuable birds. A package of Conkeys Buttermilk Starting Feed with Y-O, in which Conkeys Poultry Tonic has been mixed, is a good thing to include on your emergency shelf. It is an easily digested food particularly for sick birds. Conkey provides numerous helps for combating disease problems.

Roup (Contagious Catarrh), Simple Catarrh, Bronchitis and Bronchial Pneumonia. These are the more common diseases of the respiratory system. They are usually the result of poor sanitation, poor ventilation, draft, sudden changes of temperature, etc.

Symptoms—Are much the same in all of these diseases. They include running at the nose, closed nostrils,

swollen face, watery eyes, labored breathing, rattling or wheezing sound when breathing. In roup the breath has catarrhal odor, while in bronchitis or bronchial pneumonia there may be an accumulation of mucus, sometimes bloody, in the throat.

Treatment—Remove all sick birds to a warm dry place and give a Poultry Pill. Then use Conkeys Balmo (formerly called Conkeys Canker Special) in the eyes, nose and mouth three or four times daily to keep air passages open. Keep Old Reliable Powder (formerly called Conkeys Roup Remedy) in the drinking water and disinfect poultry house with Conkeys Nox-i-cide.

Canker—Is a very serious disease in all types of poultry but more especially in chickens. It is frequently called diphtheric roup and fowl diphtheria.

Symptoms—Canker and diphtheric patches in the mouth and throat. Bird pale and unthrifty, often showing

Have a Conkey Corner in Your Poultry House

mouth breathing and other symptoms of pneumonia, also diarrhea.

Treatment—When possible remove canker with blunt instrument and apply Conkeys Balmo (formerly called Conkeys Canker Special).

Pip—Is not a disease but a condition caused by constant forced breathing through the mouth. The mucous membrane of the tongue becomes hardened. Clean the mouth daily with cotton dipped in Conkeys Balmo, (formerly called Canker Special) and the hardened condition should soon disappear. Never try to remove the pip.

Tuberculosis—Is a highly contagious germ disease. Symptoms are loss of weight, dullness, sleepiness and emaciation. Tuberculosis is frequently called "going light." Birds seldom recover and treatment is hardly advisable. Kill and burn all affected birds. Disinfect with Conkeys Nox-i-cide.

Cholera and Cholera-Like Diseases—True Asiatic Cholera is very rare in this country and when it does appear its ravages are so rapid and deadly that cures are seldom made. Common digestive disorders frequently shows symptoms similar to cholera. Symptoms of the latter are diarrhea, yellowish or off-colored droppings, loss of appetite, excessive thirst, dull and weak.

Treatment—Give Conkeys Diatex Tablets (formerly called White Diarrhea Remedy) or Epsom Salts— $\frac{3}{4}$ to 1 lb. per 100 hens.

Crop-Bound and Sour Crop—Caused by digestive disorders. May result from eating dry grass, straw, leaves, etc., forming a mass which cannot pass beyond the crop or from mouldy food or an excessive quantity of one kind of food.

Symptoms—Usually hard distended crop, frequently gas. Feathers ruffled.

Treatment—Pour a little sweet oil into the fowl's mouth and force it into the crop. Gently massage the crop to loosen the mass. Then hold fowl head down and try to remove mass by working it out through the throat and mouth. If necessary open the crop. To do this pluck some of the crop feathers and with a sharp knife make a cut one inch long across the crop near the neck. Remove con-

tents with a button-hook. Clean the crop with a solution of $\frac{1}{4}$ teaspoonful of Nox-i-cide to 1 pt. of water. Sew up the cut with three or four stitches, first sewing the crop, then the skin. Use white silk or cotton thread. Each stitch should be tied separately. After emptying crop give bird a little baking soda, in water, to purify and sweeten the digestive tract. Feed lightly on soft feed.

Limberneck—This is merely a symptom of ptomaine poisoning. It is generally caused by eating putrified animal matter, sometimes a dead fowl or animal hidden on the premises. It may also be caused by eating spoiled ground bone or animal food. It can only be cured in the early stages.

Symptoms—The neck is so limber the bird cannot hold its head up and it staggers as it tries to walk. There is usually a thin yellowish mucus discharge from the bowels which the bird is constantly trying to throw off. Often blood will ooze from the vent.

Treatment—The enema is very effective for limberneck. It relieves the pressure on the bowels and helps the natural movement of the gizzard and intestines which are paralyzed by the poison. Give frequent drinks of cool water or milk. Continue the enema each day until the bowels show a normal condition. A thorough purging with three or four teaspoonsful of castor oil is beneficial.

Poisoning—Many fowls meet death through careless distribution of insect killers, salt, stale meat, lye, fertilizers, copperas, phosphorus from matches, rat poisons, paint left in old cans, paris green, etc.

Symptoms and Treatment—Trembling, convulsions and drowsiness. Empty the crop (see crop-bound). Where poison is due to salt, lye or fertilizers containing nitrate of soda, give strong coffee or black tea, slippery elm or similar mucilaginous liquid. Where poisoning is due to copperas, zinc or lead, give white of egg in liberal quantities.

Diseases of the Liver—Liver troubles are due chiefly to lack of exercise and over-feeding, especially on foods which are too rich or too heavy in their proportions of starch and fat, such as corn.

Symptoms—Are often misleading and slow to appear. The comb and wattles may show lack of color, gradually changing to dark red or purple. There is also loss of appetite, fever and sluggishness, with the abdomen soft and swollen. The skin sometimes takes on a yellowish hue. There is often diarrhea, dark in color, gradually changing to a yellow cast.

Treatment—Give occasional small doses of Epsom salts at the rate of $\frac{1}{2}$ lb. Epsom salts dissolved in water to 100 hens. Feed soft food. Decrease the grain. Clean up the premises and disinfect with Conkeys Nox-i-cide. Mix Conkeys Poultry Tonic in their feed to prevent further trouble.

Blackhead—Is a disease caused by a living organism which is picked up by the bird. It first attacks the caeca or blind pouches of the intestines and later affects the liver. It is most prevalent in turkeys. It is spread from diseased birds in the droppings, contaminated drinking water and food. Control of this disease lies in prevention rather than cure, since treatment is unsatisfactory. For further details on prevention send for Conkeys bulletin No. 103-C.

Chicken-Pox, Sorehead—This is a contagious disease principally of chickens and pigeons, though it sometimes affects turkeys and geese. It is especially noticeable in warm damp weather.

Symptoms—Brown and rough scabby warts on the comb, lobes and face, as a rule, but occasionally on various parts of the body.

Treatment—Isolate all affected birds and thoroughly disinfect the houses with Conkeys Nox-i-cide, then dry out by opening doors and windows. Apply Conkeys Salvo (formerly called Sorehead Remedy) daily to the affected parts. Results are hastened if the warty growths are softened with warm soapy water, then gently remove with a blunt instrument before applying the salve. Roup often accompanies sorehead. In such outbreaks use Conkeys Balmo (formerly called Canker Special). See directions on page 48.

Bumblefoot and Foot Abscess—A bruise caused by jumping from high roosts; by hard floors, splinters, etc.

Symptoms and Treatment—A hard

callus, a soft swelling or abscess. Use Corn Solvent until the callus is softened. Paint the spot with iodine. If there is a swelling or abscess it should be lanced with a sharp knife and the pus allowed to drain out. Wash with a 2% solution of Conkeys Nox-i-cide and pack the opening with Conkeys Salvo (formerly called Sorehead Remedy). Bandage the foot and continue to use Salvo until the swelling is gone.

Vent Gleet and Canker of the Vent—Are diseases of the cloaca or lower portion of the bowels. They are contagious and may be transmitted from fowl to fowl in the act of mating.

Symptoms and Treatment—The membranes are red, dry and swollen. There may be a discharge with offensive odor. Separate the sick birds from the rest of the flock and give dose of Epsom salts, $\frac{3}{4}$ to 1 lb. per 100 birds. Then with a medicine dropper inject into the vent Conkeys Balmo (formerly called Canker Special). Apply Conkeys Salvo.

Rheumatism—Is occasioned by exposure to dampness and cold.

Symptoms and Treatment—Stiffness of the joints, lameness and lack of energy. Provide dry, clean quarters and supply well balanced nourishing ration. Do not over-feed. Feed plenty of green food and give 5 grains of aspirin three times a day.

Favus—A contagious disease caused by a fungus growth. Symptoms are very much like sorehead or chicken-pox and treatment is unsatisfactory except in the early stages. Soak the crusts with soapy water. Rub the affected parts once every third day with a mixture of vaseline and small amount of sulphur. Disinfect premises thoroughly with Conkeys Nox-i-cide.

Mould (Aspergillosis)—Poisoning caused by fowls inhaling or otherwise taking into their system mould from mouldy food, mouldy litter, etc. Birds show lack of ambition, are sleepy and weak. Usually some catarrh with rattling in the throat and difficult breathing. Frequently a fungus growth on the membrane, forcing the mouth open and somewhat resembling canker. Treatment is unsatisfactory. Prevent by using only dry, clean litter. Guard against mould everywhere. Disinfect with Conkeys Nox-i-cide.

Prolapsus of Oviduct—Confined

Have a Conkey Corner in Your Poultry House

mostly to heavy layers and due to over stimulating food and straining, especially when passing large eggs. May also be due to constipation. Symptoms usually show a protrusion from the vent of a highly inflamed mass. Determine at once whether there is an egg in the passage. If so, treat as for egg-bound. Bathe the part in warm water and when dry, apply vaseline. Feed lightly. Give plenty of green food. Isolate the bird to prevent cannibalism.

Egg and Feather Eating and Cannibalism—These troubles are usually due to a diseased condition of the digestive organs or it may be a vice learned from others. Sometimes the trouble starts from an over-crowded condition in the house. Cannibalism may also start from an accidental injury or a case of prolapsus of the oviduct and once started it is very hard to cure. Feed plenty of a nourishing well balanced ration. Keep hard, sharp grit before them. Keep the birds busy by supplying litter to scratch in. In severe outbreaks clip the edge of the top beak.

Egg-Bound — Usually due to an over-fat condition.

Treatment—Inject sweet oil in the vent, then by gentle pressure assist passage. If this does not bring desired results inject oil as before and insert an oiled finger, breaking egg and removing shell. Reduce feed and give green food.

Frosted Comb—There is no remedy if comb is allowed to thaw and become black. Apply snow or ice water until frost has been extracted. Anoint with Conkeys Balmo (formerly called Canker Special). If water blisters form, lance and continue to apply Balmo. Keep birds where temperature is above freezing.

Soft-Shelled Eggs—Due to hens failing to digest enough shell-making material or to derangement of the lime secreting organs. Keep a good supply of oyster shell and grit before hens. Feed Conkeys Y-O in the mash. The Y-O supplies the necessary vitamins and aids assimilation of food and minerals.

CHICK DISEASES

White Diarrhea—Little chicks are particularly susceptible to digestive ailments. Improper brooding and

mistakes in feeding and general handling frequently bring on such troubles. Symptoms are similar to those of bacillary white diarrhea, although the white diarrhea germ is not present.

Symptoms—Chicks huddle together, are listless and stand or sit with eyes closed. Wings usually droop and the chicks may chirp almost continually. Droppings become white and creamy or gluey and may be mixed with brownish material. The excrement adheres to the down about the vent, sometimes closing the opening completely.

Treatment—The first step is to remedy the cause. Make conditions in the brooder as near right as possible and feed properly. Be sure chicks have ample hopper space, one inch per chick, or the timid chicks will not get food as needed and this will result in bowel troubles. Give Conkeys Diatex Tablets (formerly called White Diarrhea Remedy).

Bacillary White Diarrhea—This is the real white diarrhea for which science has not yet found a cure. The infection is in the ovaries of the mother hen and is passed on to the chick through the egg. The heaviest loss in chicks is from the first to the fourteenth day.

Symptoms—Much the same as for white diarrhea. Post-mortem examination usually shows a yellowish brown coloration of the liver, kidneys congested, yolk-sack unabsorbed and lungs may be studded with white areas or be serous.

Treatment — Unsatisfactory. Take all precautions to prevent the disease. Kill and burn all chicks known to have bacillary white diarrhea and follow a strict method of sanitation, disinfecting with Nox-i-cide. Experiments indicate that feeding sour milk or buttermilk has a tendency to reduce mortality. This does not lie in any specific medicinal action but is due to the fact that milk increases the vitality so that chicks are more resistant to this disease. Conkeys Buttermilk Starting Feed, being high in buttermilk content, does much to keep this disease under control.

Brooder Pneumonia—Often appears in epidemic form causing much loss. Nothing definite is known about the source of infection. It usually occurs

in dry months and one naturally suspects the dust of the brooder house or the litter, or the germ may be in the air. The disease does not seem to be communicable from chick to chick nor does it spread through the flock. All the chicks that take the disease seem to come down at once. It may make its appearance when chicks are a week or ten days old.

Symptoms—Chicks are weak and listless, falling over and dying anywhere in the house or yard. They show no tendency to huddle together as in most ailments. Breathing is difficult but there are no noises as in bronchitis. Post-mortem shows congestion of lungs or a great destruction of lung tissue. Watery spots or patches, which later change to pus-like material may be found in the lungs. These may vary in size from small seed-like spots to almost the entire lung. Microscopic examination of the destroyed tissue reveals dust particles, chick down, etc.

Treatment—There is no satisfactory treatment for this disease. The destruction of lung tissue is so intensive that they rarely recover. So far, the only hope in combating the disease is to keep down the dust and keep the air pure and free from irritating substances. Give plenty of sunlight, warmth and comfort.

Coccidiosis—Is primarily a disease of growing chicks and is likely to occur between the ages of four to twelve weeks. It is caused by a microscopic living organism which is picked up by the birds. It infests the caeca, large intestines and, in the later stages, the liver. There may be severe hemorrhages of the intestines and chicks may die from loss of blood or an inflamed condition of the caeca may prevent absorption of food until rapid and extreme emaciation and death follows.

Prevention is better than cure and coccidiosis can be prevented by absolute sanitation, especially keeping droppings cleaned up and by care of feed and water utensils. A feed that is perfectly balanced, carrying abundant vitamins means that the chicks have a fair chance to escape digestive troubles. That is one reason why Conkeys Buttermilk Starting Feed with Y-O is so popular among raisers of baby chicks. The buttermilk content provides lactic acid which helps to prevent and retard the development

of coccidiosis and white diarrhea. Being low in fibre there is less strain on the caeca. It is in the caeca that fibre is likely to cause trouble and any strain on this portion of the digestive tract would, of course, increase the susceptibility to coccidiosis which is especially a disease of the caeca.

Symptoms—Feathers become ruffled and soiled. There is a rapidly developing paleness and marked tendency to huddle together for warmth. Chicks stand humped, are sleepy and usually they have a diarrhea which is sometimes bloody. A post-mortem is likely to show the caeca clogged with hard cheesy matter, interspersed with blood and the intestines inflamed. Thoroughly clean poultry houses every morning. In one stage the living organisms are encased in a hard crusty material which makes them very resistant to disinfectants. Scrubbing with boiling lye water is the best method of cleaning. Hot water below the boiling point does not kill the germs instantly; therefore, it is necessary to have the water as hot as possible.

Be absolutely certain the drinking fountains are disinfected every morning and that they are moved each day so the floor is not allowed to stay wet in any one place since the disease develops rapidly in moisture. In dry weather the disease germs tend to die out while in wet weather a new outbreak may occur. Feed a good mash, preferably Conkeys, to which has been added 40% dried buttermilk. The lactic acid in the milk prevents the development of the disease germ and helps materially in checking it. At the very first sign of trouble it is imperative that the disease be taken in hand or the mortality will be exceedingly high. Further, if allowed to hang on until it becomes chronic it will be very hard for the remaining birds to completely recover. Many cases of paralysis are directly traceable to this disease. After the disease has been brought under control, gradually get the birds back on their usual ration. In chronic cases the caeca may contain a whitish cheesy core which the muscular walls are unable to expel.

Gapes—Are due to the presence of small worms which attach themselves to the inside of the wind-pipe and obstruct the breathing. The parasites may be taken into the body through

Have a Conkey Corner in Your Poultry House

contaminated drinking water, by eating earth worms infested with the parasite eggs or by picking up the gape worms thrown off by other chicks. The most susceptible age is between three to eight weeks.

Symptoms and Treatment—Gasping for breath, caused by presence of worms in the wind-pipe. Affected chicks can be relieved by inserting a looped horsehair in the wind-pipe, twisting it as it is withdrawn, dislodging and extracting the worms. Move chicks to new ground. Keep them housed until dew has dried for by that time worms carrying the parasites will have gone deep into the ground.

Rickets, Commonly Called Leg Weakness—The chief cause of leg weakness in chicks and growing stock is due to a lack of vitamin D in their diet. The absence of vitamins A and B from the food is also responsible in an indirect way, as these two vitamins assist the digestive organs to dissolve and make available the mineral elements in the food. Too much heat in the brooder, metallic poisoning, unbalanced feed and too close confinement may also cause leg weakness. Overcrowded conditions and poor ventilation, especially in storage brooders, are other causes of this trouble.

Treatment—Supply plenty of vitamins A, B and D at all times. Yeast and cod liver oil is the surest way to supply these vitamins. Conkeys Y-O combines these vitamins in a dependable form. If the disease has reached an advanced stage, separate the weak chicks and let them eat as much pure Y-O as they desire or mix 10% Y-O in the mash. This will effect a cure though it may take several days to notice much change. If this trouble has gone too far it is unlikely the individuals will completely recover. Prevention is best and 2% Conkeys Y-O in the mash right from the start will prevent leg weakness under almost any conditions. See pages 25 and 27 on Y-O.

Green Stuff for Chicks—Since many cases of leg weakness are traceable to improper feed, lack of green food and vitamins, we strongly urge the feeding of sprouted oats, lettuce, tender grass or other green food after the sixth day. This, with Conkeys Buttermilk Starting Feed with Y-O supplies the proper food, mineral matter, vitamins, etc., which are necessary for the best development of the chicks.

Cannibalism in Chicks—It is only natural for chicks to be picking at something and they sometimes form a habit of picking at toes and feathers or other parts of the body until chicks are practically eaten alive. It may be started by accidental injury, allowing the chicks to get a taste of blood. Among older chicks toe picking is usually due to over-crowded conditions.

Treatment—Remove all injured chicks and keep them isolated until wounds heal, using Conkeys Salvo (formerly called Sorehead Remedy). Supply plenty of clean litter for the chicks to scratch in, keeping them busy. Among older chicks enlarge their quarters or get them out in the open as soon as possible. Feed liberally on green food in connection with a balanced ration such as Conkeys Buttermilk Starting Feed with Y-O or Conkeys

Gecco Growing Mash with Y-O—rations that supply everything chicks need. Dipping the tail feathers of the birds in Conkeys Nox-i-cide will almost always break up the habit.

Head Lice—Many losses among chicks brooded with hens are due to head lice. They are found on the head and sometimes on the neck and under the wings. As a preventive measure dust the hen with Conkeys Lice Powder once each week while sitting. On the third day after hatching treat the chicks with a light application of Head Lice Ointment. Repeat each week if necessary.

Lice—Live on the fowl's body and may be controlled by dusting the birds with Conkeys Lice Powder. In this powder sodium fluoride has been incorporated with other ingredients in the right proportion for effective results without injury to eyes or throat. Repeat the application if necessary.

Mites—Are small blood-sucking parasites which prey on the birds at night and hide in cracks of the building in the daytime.

Treatment—Thoroughly clean premises and burn litter. Spray Conkeys Mite Liquid into every crack and crevice of the house, roosts, nests, etc. Repeat treatment in ten days if necessary.

Scaly Leg—Is caused by a very small insect working between the scales of the leg.

Treatment—Scrub the legs with soapy water to soften the scales. When dry apply Conkeys Scaly Leg Remedy as directed on carton.

Poultry Tick, (Blue Bug)—This parasite is common in the South. The young or larvae attach themselves to the skin of the bird for five or more days remaining firmly attached all the time. At the end of this feeding period they detach themselves and hide in the cracks of the building thereafter preying upon the birds at night.

Treatment—Lard in which has been mixed a small amount of sulphur, applied to parts attacked by the young ticks will kill all it contacts. Thoroughly spray building with full strength Conkeys Nox-i-cide and seal cracks with hot tar.

WORMS

Intestinal worms are divided into two groups, round worms and flat or tape worms.

Symptoms—Ruffled feathers, unthriftiness, paleness, diarrhea, lameness, blindness, etc.

Large Round Worms are spread through contaminated soil and are picked up by the birds. The caecal worm is small and round and is found in the blind intestines. This worm carries the causative organism of blackhead in turkeys.

Treatment—For all round worms use Conkeys Poultry Worm Remedy as directed on the package.

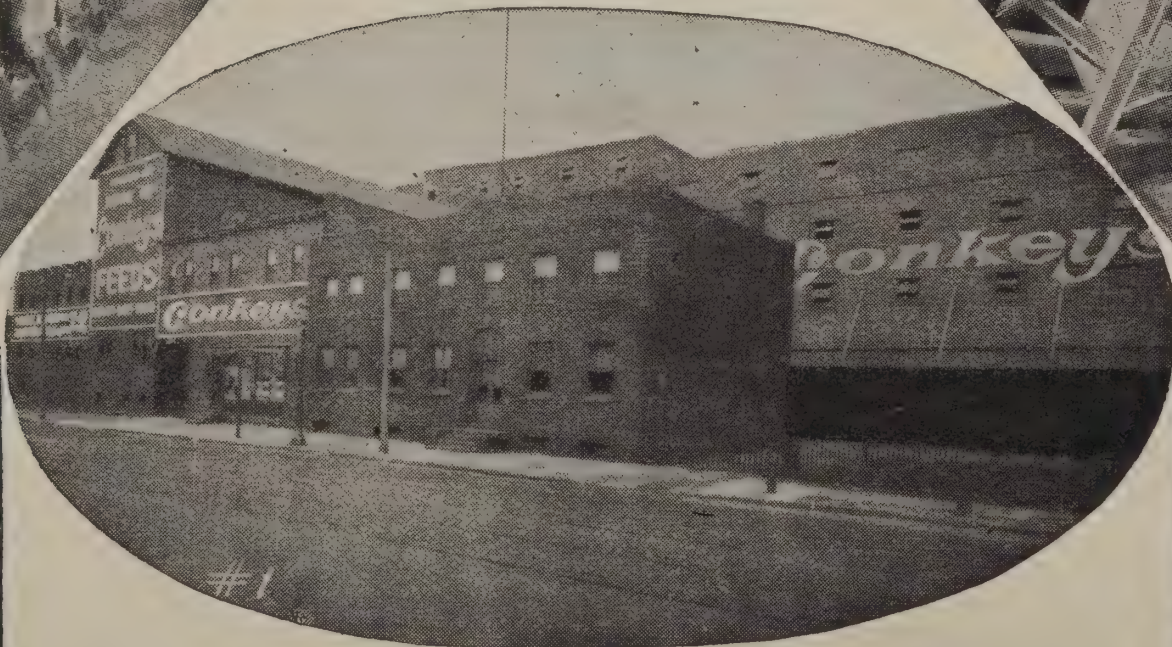
Tape Worms—Are flat segmented worms found attached to the intestinal walls. Mature segments, filled with thousands of microscopic eggs, pass out with the droppings. These eggs are consumed by secondary hosts such as house flies, earth worm, etc., which in turn are picked up by the fowls.

Treatment—Get your druggist to fill capsules with 15 grain doses of kamala, giving one capsule to each bird.

Have a Conkey Corner in Your Poultry House

No. 2. Just a corner view of some of the automatic mixers which draw an endless supply of feed from 64, five-story bins.

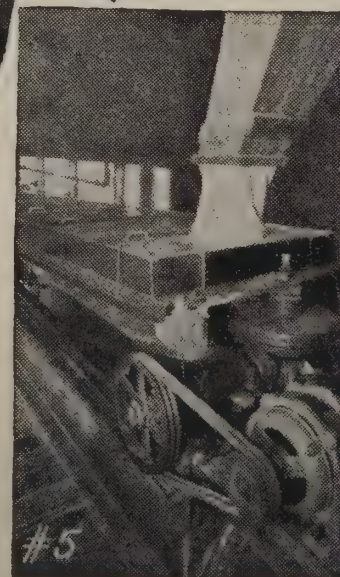
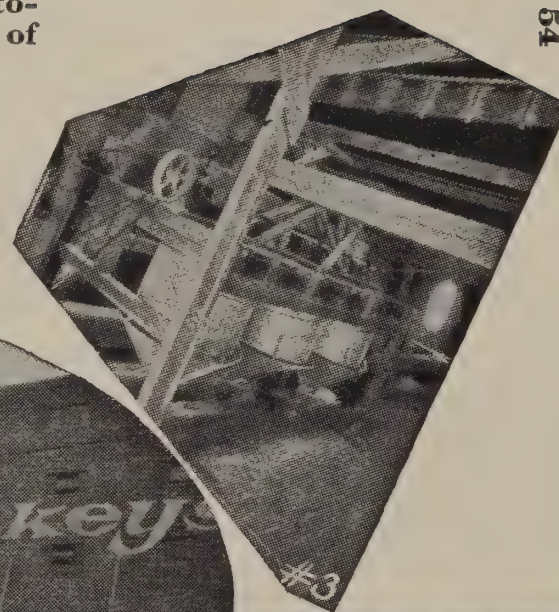
No. 3. Aspirators clean and separate into three groups the cracked grains—coarse, medium and fine.



No. 1. A view of part of one of the two Conkey Mills in Cleveland, Ohio. Other mills are located in Toledo, Ohio, Nebraska City, Nebraska and Dallas, Texas.

No. 4. One of the many automatic scale and grain sackers.

No. 5. The Rotex Sifter removes all foreign material such as hay, string, etc., which might have dropped into the by-products—bran, soybean oil meal, etc.—before it was shipped to the Conkey mills. The meshes pass through this sifter just before being bagged.



No. 7. Bag closing machine and conveyor.

No. 9. Grain separator and cleaner. The grain drops through the sieve—see inside white line—but cobs, husks, sticks, etc., drop to the floor.

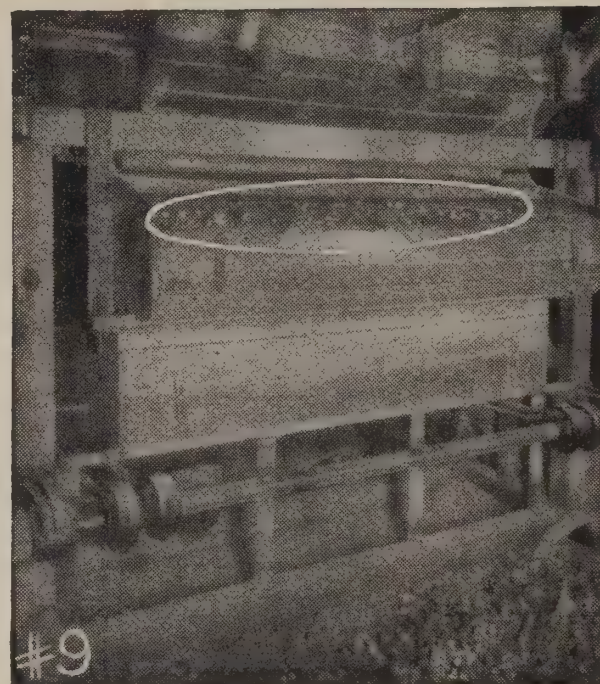
READ THIS!

No. 8. Shows a grinder. The arrow points to the magnetic pulley scraper—No. 6 is closeup view of scraper—which cleans a magnetized metal plate. This device catches any metal which might be in the grain—nails, wire, bolts, etc., and keeps it out of the grinder. Every Conkey grinder is equipped with these metal catching plates and pulleys. They protect the burrs of the grinders.

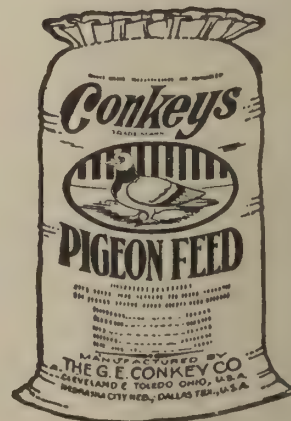
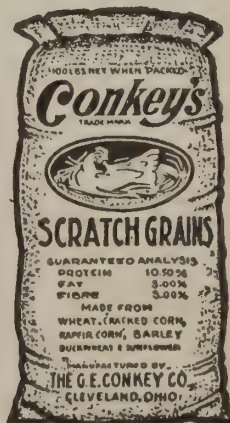
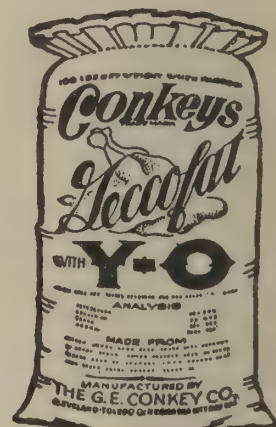
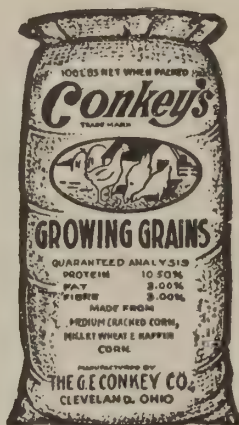
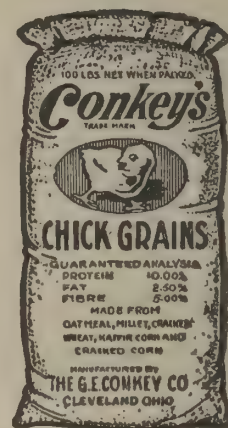
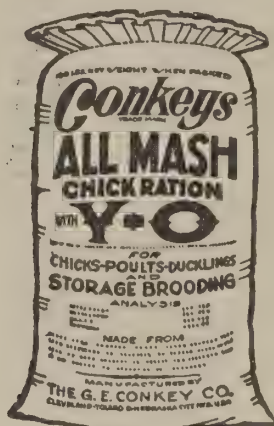
Then for your protection all mixed feeds pass over a huge magnetized plate just before sacking. This pulley removes all metal which comes from the burrs—metal so fine it is like powder but which, if not removed, would lodge in the digestive organs of birds and animals and cause serious trouble. Large pieces of metal are seldom found in good quality grains or high-grade mill-feeds. It is the fine dust-like metal

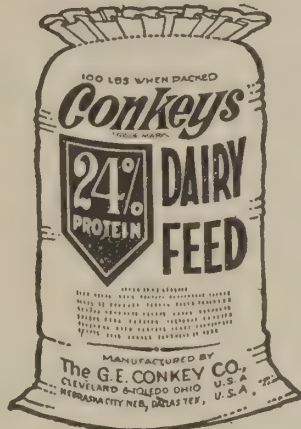


you cannot see that is really dangerous. A set of plates on a big grinder will wear out in sixty days. The Magnetic Plates and Pulleys used in the Conkey Mills are just a part of the immense equipment used to produce Quality Feeds.



CONKEY MANUFACTURES A COMPLETE LINE SOME BAG ILLUSTRATIONS



[illegible]

SCHEDULES FOR *Conkeys*

POULTRY TONIC

(For Conditioning Birds)

CHICKS—Second to Sixth week.

DRY FEEDING—Mix 2 lbs. of Conkeys Poultry Tonic with every 50 lbs. of starting feed or chick mash.

WET FEEDING—Conkey advises against feeding wet mash to chicks, but if poultrymen prefer this method, add one teaspoonful of Conkeys Poultry Tonic to each quart of wet mash.

GROWING BIRDS—Sixth week to maturity.

DRY FEEDING—Mix 2 ½ lbs. of Conkeys Poultry Tonic with every 50 lbs. of growing dry mash or developing feed.

WET FEEDING—Mix a level teaspoonful of Conkeys Poultry Tonic in each quart.

HOW MUCH TONIC TO BUY

10 Hens.....	1 ½ Lb. Pkg.
25 Hens.....	3 ¼ Lb. Pkg.
50 Hens.....	7 Lb. Pkg.
100 Hens.....	12 Lb. Pail
250 Hens.....	25 Lb. Pail
500 Hens.....	50 Lb. Bag
1000 Hens.....	100 Lb. Bag

LAYING FOWLS—

DRY FEEDING—Mix 6 lbs. of Conkeys Poultry Tonic in every 100 lbs. of dry egg mash.

WET FEEDING—If you feed wet be sure to mix one heaping tablespoonful of Conkeys Poultry Tonic in each quart of mash and make the mash just crumbly, not sloppy.

FOR MOULTING FOWLS—

Mix one tablespoonful of Conkeys Poultry Tonic to each quart of wet or dry mash.

CRATE FATTENING—

Mix 3 lbs. of Conkeys Poultry Tonic in each 100 lbs. of fattening feed or mash. In small quantities use one teaspoonful of Conkeys Poultry Tonic to each quart of fattening feed.

Conkeys Gecco Egg Mash with Y-O is also recommended as it is an excellent balanced ration for layers, containing 20% animal food and is abundantly supplied with A, B and D vitamins.

*St. James, Winnipeg,
Manitoba, Canada*

Gentlemen:

"We have been a consistent user of your wonderful Poultry Tonic since we started to keep poultry in July 1928, and we find it to be a very wonderful Tonic for the birds. We can and have highly recommended it to poultry keepers as a first class A-1 Poultry Tonic."

Mr. J. N. Hind.

FEEDING *Conkeys* Y-O

(Yeast with Cod Liver Oil)

Conkeys Y-O can be fed in a special receptacle, just as it comes from the package, but most poultrymen prefer to mix it with mash to insure each fowl getting its portion. It can be mixed with either dry or wet mash. For moist mash mix 1 oz. Conkeys Y-O to 3 lbs. of mash.

BABY CHICKS—Begin to feed Conkeys Y-O at once using a heaping tablespoonful for every 50 chicks each day or mix 2 lbs. in every 100 lbs. of mash.

GROWING CHICKS—Feed 2% to each 100 lbs. of mash.

PULLETS—1 heaping teaspoonful to every 20 birds, or 1½ lbs. in 100 lbs. of mash.

LAYING HENS, BREEDING BIRDS—Mix 2 lbs. Conkeys Y-O in each 100 lbs. of mash.

AMOUNT OF Y-O NEEDED

BABY CHICKS 1 TO 4 WEEKS 2%

No. Birds	Amount Needed	Size to Buy	Cost Per Bird	No. Birds	Amount Needed	Size to Buy	Cost Per Bird
25	¾ lb.	1 lb. pkg.	1 7/10c	500	15 lb.	25 lb. drum	9/10c
50	1½ lb.	2 lb. pkg.	1 4/10c	1000	30 lb.	50 lb. drum	8/10c
100	3 lb.	5 lb. pkg.	1 2/10c	2000	60 lb.	100 lb. drum	7/10c
300	9 lb.	2-5 lb. pkg.	1 2/10c				

CHICKS 4 TO 10 WEEKS 2%

25	1 lb.	1 lb. pkg.	2 2/10c	500	20 lb.	25 lb. drum	1 2/10c
50	2 lb.	2 lb. pkg.	2c	1000	40 lb.	50 lb. drum	1 1/10c
100	4 lb.	5 lb. pkg.	1 6/10c	2000	80 lb.	100 lb. drum	9/10c
300	12 lb.	2-5 lb. pkg.	1 6/10c				

GROWING STOCK 10 TO 20 WEEKS 2%

				100	14 lb.	25 lb. drum	4 1/5c
50	7 lb.	2-5 lb. pkg.	5 3/5c	300	42 lb.	50 lb. drum	3 9/10c
				500	70 lb.	100 lb. drum	3 1/10c

FOR HENS—FOR 30 DAYS 2%

15	9/10 lb.	1 lb. pkg.	3 3/10c	300	18 lb.	25 lb. drum	1 4/5c
25	1½ lb.	2 lb. pkg.	3c	500	30 lb.	50 lb. drum	1 7/10c
50	3 lb.	5 lb. pkg.	2 2/5c	1000	60 lb.	100 lb. drum	1 1/3c
100	6 lb.	2-5 lb. pkg.	2 2/5c				

1c worth of Y-O will feed one hen 22 days. One extra egg will pay the cost and make a profit.

FOR STOCK

(These quantities can be increased judiciously during Winter feeding)

FATTENING CALVES—1 to 8 weeks. 1 tablespoonful daily.

MILCH COWS—1 tablespoonful twice daily.

BREEDING ANIMALS—Cows: 1 tablespoonful daily.

HORSES—2 tablespoonfuls daily mixed with the grains.

SWINE—1 tablespoonful daily.

PIGS—½ teaspoonful daily, after weaning and up to 100 pounds.

FOXES—1 to 2 teaspoonfuls daily or 3 to 5% of the ration.

RABBITS—1 to 2 teaspoonfuls or 3 to 5% of the ration.

(See inside front and back covers)



Conkeys TURKEY STARTING AND GROWING MASH WITH Y-O

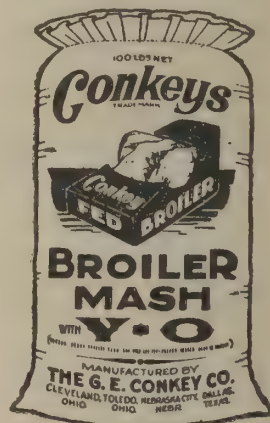
Turkey poults need more protein than do baby chicks, therefore a special feed is required for turkeys, but the same general care and system of feeding is practiced. As the poults grow and develop, less protein is needed in the ration. For this reason we recommend that up to the 8th or 9th week, the poults be fed nothing but Conkeys Turkey Starting and Growing Mash with Y-O. From this time on grains should be given; sparingly at first, increasing the amount until within thirty days the poults are allowed all the grains they desire. This system is practical whether turkeys are raised on range or in confinement. Conkeys Turkey Starting and Growing Mash with Y-O contains every food ingredient needed to make poults live, grow fast and feather rapidly. Blood, muscle and bone building elements are all present in this feed and in addition it is vi-tal-ized with Conkeys Y-O—see page 63.

APPROXIMATE ANALYSIS—Protein 23%, Fat 6%, Fiber 7%.

Conkeys BROILER MASH WITH Y-O

Chicks raised for broiler purposes will do best when fed Conkeys Broiler Mash with Y-O continuously, right from the start until they are marketed. This special mash is the result of innumerable experiments and tests. It meets all requirements whether fed to chicks in storage brooders, batteries or to chicks in yards or on range. It should be fed to chicks that are to be marketed as broilers—not to birds being raised for future layers, nor to breeders. For the latter two we recommend Conkeys Buttermilk Starting Feed with Y-O and Chick Grains or Conkeys All Mash Chick Ration with Y-O—see pages 22 to 26.

APPROXIMATE ANALYSIS—Protein 19%, Fat 6%, Fiber 7%.



Conkeys NIKALA WORM TABLETS

Conkeys Nikala Tablets contain nicotine and kamala and are covered with an air-tight coating which keeps them from dissolving. When they reach the gizzard, the grit in the gizzard cuts this coating away and the medicine is then liberated. Individual treatment of each bird is a simple matter and is the safest, surest way of destroying these profit-taking parasites. Full directions with each package.

PRICES: (Adult Size)—pkg. 50 tabs. \$1.00; 100 tabs. \$1.75; 500 tabs. \$7.00; 1000 tabs. \$12.00, postpaid. (Chick size)—pkg. 40 tabs. 50c; 90 tabs. \$1.00; 500 tabs. \$4.00; 1000 tabs. \$7.00, postpaid.

Conkeys Y-O GRAVEL-GRIT

Contains A, B and D Vitamins

Conkeys Y-O Gravel-Grit gives a great deal more than just grit to keep Canaries and small birds healthy—it gives them a daily supply of A, B and D vitamins too. Lack of vitamins causes loss of appetite; loss of body tissues; harsh, dry plumage, etc. To combat these troubles, cod liver oil and brewers' yeast are commonly mixed with the food from time to time. But birds should have vitamins regularly—EVERY DAY. Further, when cod liver oil is exposed to air the vitamins soon lose their strength. And when oil is given only occasionally it is often overdone or may be rancid, causing a diarrhea. Supply these life-giving vitamins to your pets every day by simply feeding Conkeys Y-O Gravel-Grit. Price 15c pkg. at your Conkey Dealer.



Conkeys HOUSEHOLD SPRAY

Use Conkeys Household Spray in your home and be relieved of worry over flies, mosquitoes, roaches, bed bugs, ants and silver fish. It repels insects for a long time, has a pleasing odor to people and does not stain or discolor objects on which it falls.

PRICES: Half pints 35c; Pints 60c; Quarts \$1.00, at your Conkey Dealer.



For free advice on poultry problems write
Consultation Department, The G. E. Conkey Co.

Conkeys Poultry Remedies

Known All Over the World—The Poultryman's Standby. Keep a Few Select Remedies Always at Hand Ready for Emergency.

Conkeys OLD RELIABLE POWDER (Formerly Conkeys Roup Remedy)

This famous treatment has been on the market for thirty years, known to poultrymen everywhere as Conkeys Roup Remedy. Many would not try to keep poultry without Conkeys—the Old Reliable. Easily given in the drinking water letting the birds help themselves. Keep it on hand for use in emergency or put it in drinking founts on cold rainy days or when there is a sudden change in weather. In mild doses it acts as a tonic. See Roup—page 48.

EASTERN AND WESTERN PRICES—Pkgs., 25c., 50c., \$1.00; 1½ lb. can, \$2.35, all postpaid; 5 lb. can, \$5.50; \$5.75 postpaid.



Conkeys PILLS (Formerly called Conkeys Roup Pills)

Administer these pills twice daily, in extreme cases three times a day. See Roup—page 48.

EASTERN AND WESTERN PRICES—Pkgs., 25c., 50c., \$1.00, all postpaid; breeder size \$2.75; \$3.00 postpaid.

Conkeys BALMO (Formerly called Conkeys Canker Special)

A soothing cooling application for relieving irritation around the swollen eyes and head and in the mouth when treating conditions caused by colds and similar troubles. See page 48.

EASTERN AND WESTERN PRICES—Package 50c., pint \$1.20, quart \$2.00, gallon \$7.00. Small size prepaid, other sizes express collect.

Conkeys SALVO (Formerly called Sorehead Remedy)

Good to have on hand for treating sores, cuts and wounds of any description. See page 50.

PRICES—Pkgs., 25c., or 30c., postpaid.



Conkeys DIA-TABS (Formerly called Conkeys White Diarrhea Remedy)

These tablets have been on the market for years as Conkeys White Diarrhea Remedy, then Conkeys Diatex and now called Conkeys Dia-Tabs. Once you have used this old reliable preparation you will never be without it. An astringent tablet for drinking water of poultry and baby chicks. Play safe—keep this remedy in the drinking water of all baby chicks until danger period of the first few weeks is past. See pages 52 and 53.

EASTERN AND WESTERN PRICES—Pkgs., 25c., 50c., \$1.00, all postpaid; breeder size (950 Tablets), \$3.75; \$3.85 postpaid.

Conkeys POULTRY WORM POWDER (For Flock Treatment)

Over 90 per cent of market poultry are infested with worms, of which there are many varieties—Roundworms, Gizzard and Caecal Worms and Flukes or Leaf Worms. Worms cause great loss and flocks should be treated regularly. See directions on packages of Conkeys Worm Powder. See page 53. **PRICES—Pkgs., 25c., 50c., or 30c., 55c. postpaid; breeder size (5 lbs.), \$2.75; \$2.85 postpaid.**



Write Conkey about your poultry problems

Conkeys SCALY LEG REMEDY

An excellent application for removing this unsightly condition.
PRICES—Pkgs., 25c.; or 30c., postpaid.



Conkeys LICE POWDER (Contains Sodium Fluoride)

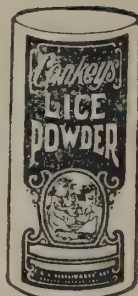
For dusting hens, nests, growing chicks and for use wherever body lice must be overcome. **PRICES**—Pkgs., 35c., 75c.; pails, 12 lb., \$2.60; 25 lb., \$5.00. Parcel post, express or freight extra.

Conkeys MITE LIQUID

For painting roosts, fittings, the inside of house, nest boxes, etc. **PRICES**—Cans, qt., 60c.; 2 qt. 90c.; gallon \$1.50; 5 gal., \$7.00. Parcel post, express or freight extra.

Conkeys HEAD LICE OINTMENT

For overcoming and preventing the murderous head louse which causes loss of so many hen-hatched chicks. **PRICES**—Pkgs. 10c., 25c.; or 15c., 30c., postpaid.



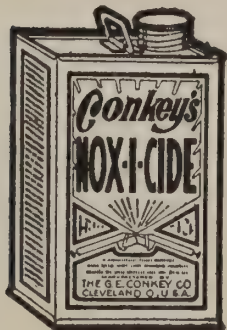
Conkeys NOX-I-CIDE (Dip and Disinfectant)

Every poultry yard, ranch, home, factory, stable, store, office building—in fact, every place where sanitation is necessary to health—needs Conkeys Nox-i-cide, every day in the year.

For poultrymen, Nox-i-cide is indispensable as a red mite destroyer—paint it on the roosts and spray it into cracks. Spray premises daily when disease is present and once a week as a preventive of red mites, ticks, “blue-bugs” and disease epidemics.

EASTERN PRICES—Cans, pt. 40c.; qt. 60c.; 2 qts. 90c.; 1 gal. \$1.50; 5 gal. \$6.75; 10 gal. \$12.75. Parcel post, express or freight charges extra.

WEST OF THE ROCKIES—Cans, pt. 45c.; qt. 70c.; 2 qts. \$1.00; 1 gal. \$1.75; 5 gal. \$8.00; 10 gal. \$15.00. Parcel post, express or freight charges extra.



Conkeys FLY KNOCKER

Dairymen, drivers, horsemen, stock raisers, cattlemen, sheep raisers declare this remedy the best investment they make—animals free from insects do better in milk and butter production while growing stock unquestionably fattens faster when relieved from biting, stinging, disease-spreading insects.

EASTERN PRICES—Cans, qt. 60c.; 2 qt. 90c.; gal. \$1.50; 5 gal. \$7.25; 10 gal. \$14.00. Parcel post, express or freight charges extra.

WEST OF THE ROCKIES—Cans, qt. 70c.; 2 qt. \$1.10; gal. \$1.75; 5 gal. \$7.50; 10 gal. \$13.50. Parcel post, express or freight charges extra.

Conkeys STOCK TONIC

A general conditioner of real merit for live stock.

EASTERN PRICES—Packages, 25c., 50c., \$1.00; pails, 12 lbs. \$2.10; 25 lbs. \$3.45; bags, 50 lbs. \$5.25; 100 lbs. \$10.00. Parcel post, express or freight charges extra.

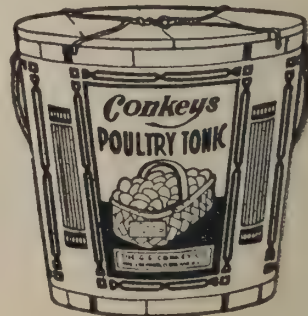
WEST OF THE ROCKIES—Packages, 30c., 60c., \$1.20; pails, 12 lbs. \$2.75; 25 lbs. \$4.50; bags, 50 lbs. \$7.25; 100 lbs. \$13.00. Parcel post, express or freight charges extra.

Conkeys POULTRY TONIC

Every bird from chick to maturity will be more productive, healthier and more profitable if given a good tonic and regulator. Conkeys Poultry Tonic helps birds get more out of their feed. They produce more eggs and better flesh on LESS FEED, by better digestion and assimilation. Conkeys Tonic is all medicine—free from filler, red pepper and “hot stuff.” Keeps the young chicks growing, makes molting easy, strengthens the bird for bad weather and generally maintains a high health average.

EASTERN PRICES—Packages, 1½ lbs. 25c.; 3¼ lbs., 50c.; 7 lbs. \$1.00; pails, 12 lbs. \$1.60; 25 lbs. \$3.00; bags, 50 lbs. \$5.00; 100 lbs. \$9.50. Parcel post, express or freight charges extra.

WEST OF THE ROCKIES—Packages, 1½ lbs. 30c.; 3¼ lbs. 60c.; 7 lbs. \$1.20; pails, 12 lbs. \$2.25; 25 lbs. \$3.75; bags, 50 lbs. \$7.00; 100 lbs. \$13.00. Parcel post, express or freight charges extra.



Write Conkey about your poultry problems

Conkeys Y-O—COD LIVER OIL— AND SUNLIGHT

It is now definitely known that the lack of vitamins brings about many ailments in all forms of animal and bird life, especially in the young. They must have these vitamins and since vitamins A and D are found in large quantities in cod liver oil and vitamin B is found to be very strong in yeast, Conkey has taken these two products and, by a secret process, sealed and combined them in such manner that the A and D vitamins of the oil do not lose their potency.

Putting this amazing discovery into practical use through the manufacture of Conkeys Y-O is a boon to poultrymen as is illustrated by the thousands of satisfied customers.

Conkeys Y-O is a chocolate brown powder, which can be easily and readily mixed with any dry mash. It has the savory odor of clean, sweet, freshly-refined cod liver oil and is unusually tasty and palatable to poultry. Hence fowls eat it greedily, as do all birds and animals.

PRICES—Eastern: 1 lb. package 50c.; 2 lb. package 90c.; 5 lb. package \$1.60; 25 lb. pail \$5.45; 50 lb. drum \$9.75; 100 lb. drum \$17.50; 100 lb. bag \$16.50.

WEST OF THE ROCKIES—1 lb. package 55c.; 2 lb. package \$1.00; 5 lb. package \$1.85; 25 lb. pail \$5.95; 50 lb. drum \$10.75; 100 lb. drum \$19.50; 100 lb. bag \$18.50.

ADVANTAGES IN USING Y-O FOR POULTRY

Improves Egg Production

It increases size of eggs, strength of shell and number laid. Poultrymen have long been baffled by shrinkage of size of eggs and decrease in the quality of shells of eggs laid by their flock as production increases. Even though the ration contains all the raw material, the digestive organs of the hen cannot make soluble a sufficient quantity rapidly enough to meet the increasing rapidity of the lay. After the reserve energy stored in the body of the hens becomes exhausted, the eggs become smaller, the shells thinner and the vitality of the birds is reduced to the breaking point. Y-O helps to solve this problem.

Conkeys

INCREASES FERTILITY

Mysterious life giving forces—vitamins A, B and D—imparted from the sun's radiant energy, are found stored most abundantly in the cells of the yeast plant and the liver of the cod, where we can draw upon them when Old Sol is either absent or indifferent to our needs. By simply adding 2 lbs. of Y-O to 100 lbs. of mash fed you can insure maximum fertility from breeding pens.



Y-O FOR RABBITS, FOXES, DOGS, CATS, ETC.

Y-O For Rabbits

Fur bearing animals all benefit by Y-O. The fact that many poultry raisers are also interested in rabbit raising, fox farming, etc., has led to new interest in Conkeys Y-O for use with other animals.

Experiments of breeders have proven that Conkeys Y-O fills a great need in rabbit raising in three important respects: improving the fur, the meat, and prolonging the vitality of breeders. The benefit of Y-O is certain, corresponding to the results secured with poultry.



Rabbits are bred from seven months to four years old. The doe carries her young thirty-one days and it requires sixty days to raise and wean the young, which should be marketed at eight weeks as fryers, except where wanted for breeding purposes. It is usual to breed four times a year but possible to breed oftener if the does are not kept longer than one year. The vitamins Y-O contains will stop the drain of vitality, thus prolonging the usefulness of fine stock for breeding. We strongly urge the use of Conkeys Y-O to improve quality and quantity of out-put.

Y-O For Foxes

Like all live stock under artificial conditions, foxes must be fed scientifically to insure a fully balanced ration. Cod liver oil is almost universally used in fox feeding. Both the fat of the oil and the vitamins in cod liver oil help to produce remarkable results in pelt improvement. With proper feeding the pelt should be clean, bright and sparkling by November, with dense underfur and fine, wavy hair, instead of coarse, straight and flat. Because of the very short season when pelts are prime (November to January) every advantage must be taken of all the help available.

Conkeys Y-O helps to improve the fur because it combines the virtues of high-test cod liver oil, rich in A and D vitamins, with concentrated Marmite or brewers' yeast, which is rich in B vitamin. In feeding foxes, the B vitamin is very important.

Y-O can be sprinkled on the regular food in a clean economical manner. Adult foxes will make better gains on their regular food rations when Conkeys Y-O is added—3 to 5½%—and the health and condition will improve because of the protective vitamins. Yeast furnishes vitamin B, cod liver oil furnishes vitamins A and D.

Y-O powder can be combined with any part of the ration. In summer it will greatly improve the development of the fox cubs and bring about a better growth of fur. It will not only give the young a better start but help the mother fox. Used with breeders it undoubtedly will improve the quality of the young and in many cases increase the litter. In short, Y-O assists Nature to accomplish her object in reproducing and maintaining good specimens of the species.

Y-O For Dogs, Cats, Etc.

Y-O is a protective vitamin food, strongly recommended for use with all animals to improve health and favorably effect breeding. The benefit from using Y-O is quickly noticeable in the improved appearance of the coat. Y-O is easy to handle as the dry powder form is convenient and the patented process of sealing the oil to prevent oxidation insures good keeping qualities.

Easy to mix with any Mash

MORE EGGS

We believe we owe it to you to express our appreciation of your Y-O, for we began feeding Y-O in larger amounts right in the dead of winter, and we began to get more eggs right from that time on. We are certainly pleased with the results.

J. M. Hill, Denton, Mont.

GOOD HATCHES

We are using Y-O in the mash for all of our breeding stock, and in all my years of running an incubator I have never received the percentage of hatch I am receiving now; altogether beyond my expectations. I give Conkeys Y-O absolute credit for the increase. We will use at least a ton of Conkeys Y-O next year.

H. J. Kramer, Alexandria, Minn.

PRODUCES STRONG CHICKS

Last year I began to feed Y-O to my breeders the latter part of January. Out of 400 chicks I only lost 3. I cannot help but think that Y-O turned the trick. I did not stop there, but fed Y-O to the chicks; they all lived and I have never had a flock with so much vigor. I do not know what a sick bird is, have not had a case of cold.

T. M. Hamp, Mapleton, Minn.

USED IN BATTERY BROODING

You will note that I have been a constant user and booster of Conkeys Y-O for several years. I used it the past season on thousands of battery chicks with splendid results and would not start a season without it. For controlling leg weakness it has no equal. It also encourages feather growth.

*Lee Coultly Hatchery,
Tupelo, Miss.*

FINE FOR DUCKLINGS

Your shipment of Y-O was duly received and my 100 ducklings are still 100 and have doubled in weight during their first week.

*Frederick R. Hazard,
Saunderstown, R. I.*

BIGGER RABBITS

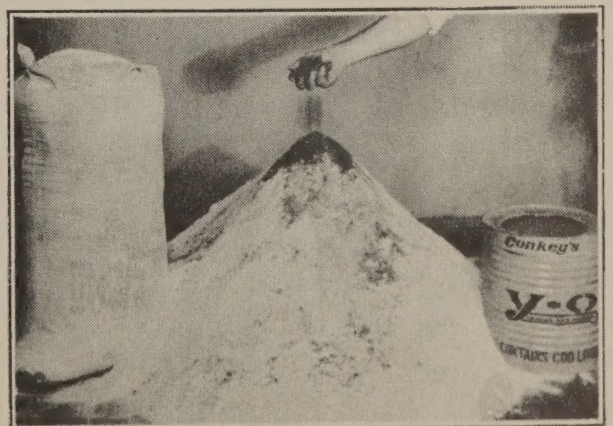
I am a breeder of Chinchilla and Angora Rabbits, and by feeding one teaspoonful of Conkeys Y-O per day mixed with oats I have gotten bigger rabbits and find it also improves the quality of their fur.

Paul B. Silver, Woodbridge, N. J.

WONDERFUL FOR FOXES

We have a fox ranch and have been feeding Y-O to our foxes for two years with very satisfactory results. I am secretary of the Ohio Fox Breeders' Association, and I intend mentioning your Y-O to our members at our next meeting, which will be in the form of a Summer School, lasting two days.

B. E. Crider, Cridersville, Ohio





Conkeys POULTRY BOOK